THICKENING THE LIGHT DIVISION: THE NEED FOR A FOURTH RIFLE COMPANY IN THE LIGHT INFANTRY BATTALION

A Monograph
by
Major Michael E. Haith
Infantry



School of Advanced Military Studies United States Army Command and General Staff College Fort Leavenworth, Kansas

First Term AY 89/90

Approved for Public Release; Distribution is Unlimited

90-3176

(S)

	REPORT DOCUMENTATION				N PAGE				
a. REPORT S	REPORT SECURITY CLASSIFICATION			16 RESTRICTIVE MARKINGS					
a. SECURITY	CLASSIFICATION AU	THORITY		3 DISTRIBUTION	/AVAILABILITY	OF REPORT			
1b. DECLASSIFICATION / DOWNGRADING SCHEDULE			Approved for public release; distribution unlimited						
4. PERFORMING ORGANIZATION REPORT NUMBER(S)			5. MONITORING ORGANIZATION REPORT NUMBER(S)						
	TO OTTO THE TOTAL	27 3701 1431413					3211(3)		
			6b. OFFICE SYMBOL (If applicable) ATZL-SWV	7a. NAME OF MONITORING ORGANIZATION					
	(City, State, and ZIP	Code)		7b. ADDRESS (Cit	ty, State, and Zi	P Code)	***************************************		
ort Leav	venworth, Kans	as 660	027-6900						
a. NAME OF ORGANIZA	FUNDING/SPONSOR ATION	ING	8b. OFFICE SYMBOL (If applicable)	9. PROCUREMENT INSTRUMENT IDENTIFICATION NUMBER			ION NUMBER		
c. ADDRESS (	(City, State, and ZIP C	'ode)		10 SOURCE OF FUNDING NUMBERS					
				PROGRAM ELEMENT NO.	PROJECT NO.	TASK NO.	WORK UNIT ACCESSION N		
					ì	1			
MAJ Mich la. TYPE OF	nael E. Haith REPORT	13b. TIME C	COVERED TO	14. DATE OF REPO	ORT (Year, Mont	h, Day) 15	. PAGE COUNT		
S. SUPPLEME	ENTARY NOTATION						<del></del>		
<del>,</del>					···				
7.	COSATI CODE	S UB-GROUP		S (Continue on reverse if necessary and identify by block number) try Division High Intensity Conflict					
			TERMETHIAME	rv Bivision	ry Battalion Mid Intensity Conflict				
FIELD	3.00	OB-GROOP							
FIELD			Light Infant Low Intensit	ry Battalion y Conflict	Mid Inte		onflict		
FIELD	This stud have on the demands acrobeen considering in fantry divisimply recotransportations at ronger and focused on the consequence of the conseq	y examire light on the certain (Iommend on asset the division of the division of the division asset the divi	Light Infant Low Intensity  y and identify by block re  nes the Impact infantry balt conflict spectre bate concerning LID). Most crit the addition	ry Battalion y Conflict number)  adding a for alion's abi um. Since i the proper ics focus ac of armor that this ure battlefic	Mid Inte Rapid De Arth rifle lity to mee ts activati structure t the divis and more would make elds. None t power and	company et conflion, the e of the sion lev antitan howeverd the bu	would icting re has light el and k and vision , have		
FIELD	This stud have on the demands acrobeen considering in fantry divisimply recotransportations at ronger and focused on the consequence of the conseq	y examire light on the certain (Iommend on asset the division of the division of the division asset the divi	Light Infant Low Intensity  and identify by block of  nes the Impact infantry balt conflict spectre bate concerning LID). Most crit the addition ts. They feel urvivable on fut sion's basic sou	ry Battalion y Conflict number)  adding a for alion's abi um. Since i the proper ics focus ac of armor that this ure battlefic	Mid Inte Rapid De Drth rifle lity to mee ts activate structure t the divis and more would make elds. None t power and fantry bate	company et conflicon, the e of the sion lev antitan e the di howeverd the butalion.	would icting re has light el and k and vision have ilding		
FIELD  3. ABSTRACT	This stud have on the demands acrobeen considering in fantry divisimply recotransportations at ronger and focused on the consequence of the conseq	dy examire light on asset the division deploy	Light Infant Low Intensity  and identify by block of  nes the Impact infantry balt conflict spectric ebate concerning LID). Most crit the addition ts. They feel urvivable on fut sion's basic sou yment packages;	ry Battalion y Conflict number)  adding a for alion's abi um. Since if the proper ics focus af of armor that this ure battlefice of comba the light in  (continued of  21 ABSTRACT SE	Mid Inte Rapid De Arth rifle lity to mee ts activati structure t the divis and more would make elds. None t power and fantry bati	company et conflion, the e of the slon lev the di howeverd the butalion.	would icting re has light el and k and vision have ilding		

MAJ Michael E. Haith DD Form 1473, JUN 86

Previous editions are obsolete.

(913) 684-2138

ATZL-ASW
SECURITY CLASSIFICATION OF THIS PAGE

This paper begins by examining the origins of the LID in order to determine the roles for which it was created. The paper then analyses these roles in order to determine the tactical missions that are likely to be assigned to the light infantry battalion. Once these points have been determined, the current structure of the light infantry battalion will be examined using the principles of tactical organization developed by Major Glenn M. Harned to compare capabilities against force design objectives. The principles he proposes are unity of effort, economy of force, flexibility, integration, standardization, resiliency, and continuity. This will be followed by a look at historical examples of battalions organized with four rifle companies. These examples include the U.S. Army battalion during the Vietnam Conflict, 2d Battalion, The Parachute Regiment in the Falklands, and the current USMC infantry battalion. Finally, this study concludes by examining the implications of adding the fourth rifle company on the light battalion's ability to meet demands across the conflict spectrum and the impact on the division's design constraints (10,000 soldiers and 500 sorties).

This study concludes that adding a fourth rifle company would significantly improve the present capabilities of the light infantry battalion. The additional company will enable the battalion to achieve economy of force more effectively and facilitate unity of effort. It will also increase flexibility as well as resiliency therefore improving the ability of the battalion to conduct continuous operations.

Because of the rapidly changing strategic environment and budget restraints, the LID must be optimized to operate across the conflict spectrum. Therefore it must be context adaptable rather than context specific. Furthermore, providing heavy assets to the battallons will only serve to destroy the unique tactical style of light infantry and result in the reappearance of the deployability and operational limitations of the H-series infantry division.

### SCHOOL OF ADVANCED MILITARY STUDIES

# MONOGRAPH APPROVAL

# Major Michael E. Haith

m: +1.	<b>c</b>	M		mh i ala		<b>.</b>	* 2	n:-	. <b>.</b>		ml	
Title	e or	Mono	graph:	Thicke	ening	tne	Light	Div	1510	n :	The	—
				Need	for a	Four	th Ri	fle	Compa	any	in	the
				Light	Infar	ntry	Batta	lior	ı			
_	_											
Appro	oved	by:										
		$\sim$										
	(	The	Par	,	)		M	lonog	graph	Dir	ect	or
Lieu	tena	n/t Co	lonel Jo	hn P.	únigar	n, MA	A					
	$\vee$			`								
	11	illin		<u> </u>			r	irec	ctor,	Sch	2001	Ωf
Color	nel	Willi	am H. Ja	nes, MA	, MMAS	3			nced			
								Stuc	iles			
	N		, ,	/								
	Ph	rlip	1. Bro	Mun			D	irec	ctor,	Gra	dua	te
Phil:	ip J	. Bro	okes, Ph	.D.				Degr	ee Pi	rogr	am	
	_		this _	16 th		•	Ma	rel.		100		
	ACC	epted	this		_ day	or _	70-00			199	, 0	

#### ABSTRACT

THICKENING THE LIGHT DIVISION: THE NEED FOR A FOURTH RIFLE COMPANY IN THE LIGHT INFANTRY BATTALION by MAJ Michael E. Haith, 57 pages.

This study examines the impact adding a fourth rifle company would have on the light infantry battalion's ability to meet conflicting demands across the conflict spectrum. Since its activation, there has been considerable debate concerning the proper structure of the light infantry division (LID). Most critics focus at the division level and simply recommend the addition of armor and more antitank and transportation assets. They feel that this would make the division stronger and more survivable on future battlefields. None however, have focused on the division's basic source of combat power and the building block of rapid deployment packages; the light infantry battalion.

This paper begins by examining the origins of the LID in order to determine the roles for which it was created. The paper then analyses these roles in order to determine the tactical missions that are likely to be assigned to the light infantry battalion. Once these points have been determined, the current structure of the light infantry battalion will be examined using the principles of tactical organization developed by Major Glenn M. Harned to compare capabilities against force design objectives. The principles he proposes are unity of effort, economy of force, flexibility, integration, standardization, resiliency, and continuity. This will be followed by a look at historical examples of battalions organized with four rifle companies. These examples include the U.S. Army battalion during the Vietnam Conflict, 2d Battalion, The Parachute Regiment in the Falklands, and the current USMC infantry battalion. Finally, this study concludes by examining the implications of adding the fourth rifle company on the light battalion's ability to meet demands across the conflict spectrum and the impact on the division's design constraints (10,000 soldiers and 500 sorties).

This study concludes that adding a fourth rifle company would significantly improve the present capabilities of the light infantry battalion. The additional company will enable the battalion to achieve economy of force more effectively and facilitate unity of effort. It will also increase flexibility as well as resiliency therefore improving the ability of the battalion to conduct continuous operations.

Because of the rapidly changing strategic environment and budget restraints, the LID must be optimized to operate across the conflict spectrum. Therefore it must be context adaptable rather than context specific. Furthermore, providing heavy assets to the battalions will only serve to destroy the unique tactical style of light infantry and result in the reappearance of the deployability and operational limitations of the H-series infantry division.

# Table of Contents

		Page
I.	Introduction	1
II.	Evolution of the Army's Light Forces	4
	Origin of the Light Division	4 7
III.	Light Infantry Missions	12
	A Context Adaptable Force	12 15 19
	The Tactical Level	22
IV.	Historical Examples	28
	Vietnam The Falklands Modern USMC Infantry Battalion	29 33 39
٧.	Restructuring the Light Infantry Battalion	43
VI.	Conclusions	49
Figures		
2. St 3. U. 4. U. 5. U. 6. U. 7. U. 8. Fa 9. 20 10. Ba 11. US	S. Army Light Infantry Division, 1944  tandard U.S. Army Infantry Division, 1944  S. Army Light Infantry Division, 1989  S. Army Light Infantry Battalion, 1989  S. Army Light Infantry Battalion (Detailed), 1989  S. Army Infantry Battalion, ROAD, 1964  S. Army Infantry Battalion, Vietnam, 1968  Alkland Islands Campaign, 1982  Battalion, The Parachute Regiment, 1982  Attle For Darwin and Goose Green, 28-29 May, 1982  SMC Infantry Battalion, 1957  EU (SOC), 1989  Toposed Light Infantry Battalion w/ 4 Rifle Companies	6 11 11 23 30 34 36 36 38 42 42 44
Endnotes	3	50
Bibliogr	raphy	56

. . . in view of the proliferation of lethal, accurate weapons in troubled Third World nations and the armor orientation of the Soviet forces in Europe, the proper mix of heavy and light forces may be one of the most important decisions that the . . . Defense Department will have to make.

#### I. <u>INTRODUCTION</u>

The issue of current and future force structure has been vigorously debated within the Army for over a decade. As a result, since 1975, the Army has suffered through "almost constant organizational turmoil." There have been a number of force design initiatives and studies including the Division Restructuring Study, Army 86, the Army of Excellence, and most recently Army 21. In each of these studies, the Army's light forces have remained at the heart of the debate. The ultimate concern is the strategic context within which these light forces must operate. The light-heavy force mix to which the passage quoted above refers, reveals the dilemma facing our national as well as our senior Army leadership. Establishing an Army force structure that is both robust and flexible has become even more difficult in light of two recent developments; the defense budget crisis and the growing demand for conventional force reductions. As recently as June 1989, Secretary of Defense Richard B. Cheney suggested that these factors could create the requirement for a smaller, lighter force structure. The United States therefore, may be forced to address extensive world wide commitments with reduced forces. In light of this possibility and the nation's global commitments, it is critically important that the Army's force structure be correctly balanced between light and heavy forces so that it is alignment with our national security interests.3

Of equal importance in this debate is the correct structure of the light forces. The Light Infantry Division (LID) was originally intended to meet the demand for a force that could rapidly deploy against threats to U.S. interests at the lower end of the conflict spectrum. Army leaders recognized that the Army could not afford nor justify forces with so narrow a purpose. As a result, the LID was developed and

promoted under the assumption that while its primary focus would be Low Intensity Conflict (LIC), it should also have utility across the conflict spectrum. Additionally, in articulating the purpose of the LID, it was apparent that light forces had both a deterrent and combat role. Furthermore, the rapid deployment of a light force of even battalion or brigade size into a crisis area will have important strategic implications. Therefore, while these "microstrategic" forces must be able to deploy rapidly, their deployment must not cause an automatic escalation of the crisis. Yet, light forces must be able to meet the increasingly sophisticated threats posed by several Third World nations. These considerations are in many respects, mutually different force designs. To appear exclusive argue for and non-threatening but possess the ability to fight and win in a low intensity environment and also have utility in mid to high intensity combat remains difficult to reconcile. Nevertheless, as Lieutenant Colonel Robert B. Killebrew reminds us, the risks of miscalculation to U.S security interests are greater than ever before, "Today, the margin for error is much smaller, both vis-a-vis the Soviets and even in the heavily armed Third World. In today's world, the consequences of U.S. military failure are clearly more dangerous than they were 40 years ago."5

It is not surprising therefore, that a great deal of confusion exists within the Army concerning the operational and organizational (0&0) concept for the light division. Currently, the LID is viewed more as a general purpose force with utility across the conflict spectrum rather than a unique force with narrow application across that spectrum. Consequently, there is uncertainty within the Army concerning the proper structure and primary focus of the LID. Furthermore, this misunderstanding is so widespread that the word 'light' now refers more to the division's size and deployability rather than to the qualities peculiar to 'classic' light infantry. As a result, the current 0&0 concept for the division satisfies neither its critics nor many of its supporters. Each contend that it is both too heavy to deploy rapidly and too light to fight when it gets there. The major criticism is that the LID has traded the firepower necessary not only to win but to survive,

in exchange for the questionable advantage of increased deployability. The implication of this criticism is that the LID is inadequately structured to meet conflicting demands of so many different contingencies.

In order to resolve the confusion and address criticism both in and out of the Army concerning the purpose, organization, and capabilities of the LID, General Maxwell Thurman, then Commander, TRADOC initiated a LID "Heavy/Light Assessment" in July 1988. The purpose was to, "develop recommendations for near term changes to make (the) LID more fightable across (the) spectrum of conflict." More specifically, General Thurman wanted to vitalize, improve the suitability and hitting power, and 'thicken' the combat capability of the LID.

The consensus of critics and supporters alike is that the LID needs improved antiarmor capabilities. The purpose of this paper is to examine another alternative. Likely scenarios envision the deployment of the LID in packages tailored to a specific situation. The form these packages may take is virtually limitless and can range from a battalion combat team to the entire division. The light infantry battalion represents the basic building block in any of these packages and as such represents a logical starting point for any investigation of force structure. In addition, one of the major points that former Chief of Staff of the Army employed to justify the activation of the LID was that, "'Soldier Power' will make the light division uniquely effective." Based on these two considerations, the specific question that this investigation will address is, 'What impact would adding a fourth rifle company have on the light infantry battalion's capability to meet demands across the conflict spectrum?'

This monograph will investigate this question in the following manner: Initially, the operational requirement which led to the activation of the LID will be examined. This will be followed by an analysis that will identify the missions the LID and its light battalions will likely receive in low, mid, and high intensity conflict (LIC, MIC, and HIC). Because these missions imply certain capabilities, an assessment will be made using principles of tactical organizations developed by Major Glenn Harned to determine if the light battalion as

it is currently structured can accomplish these missions. Next, historical examples from Vietnam and the Falklands will be presented which suggest alternatives to the present light battalion structure. In addition, the USMC infantry battalion which is currently organized with four rifle companies will be examined. Finally, a light infantry battalion organized with a fourth rifle company will be examined along with the impact such a restructuring would have on the original design criteria for the LID (10,000 troops and 500 sorties).

Because of the increasingly complex demands of future conflict, the light infantry battalion must be optimally structured to conduct operations in a variety of environments. However, light infantry does not possess unlimited utility. The missions assigned to light forces must be carefully considered. Consequently, the organization of the light infantry battalion must reflect a balance between the requirements for rapid deployability and the capability to operate across the conflict spectrum.

#### II. EVOLUTION OF THE ARMY'S LIGHT FORCES

#### ORIGIN OF THE LIGHT INFANTRY DIVISION

The purpose of the [World War II light] division was to economize manpower. . .; to permit available shipping to transport overseas maximum fighting power; to provide a more flexible organization through economy of force and massing of power to reduce headquarters overhead; and to devote strength to offensive units.

"A Perspective on the Light Division" US Army Center of Military History

In order to identify the operational requirement which led to the activation of the LID, it is first necessary to trace the evolution of the light division. This will then lead to a better understanding of the current structure of the LID and its maneuver battalions. As one author has accurately pointed out, the origin and subsequent evolution of the LID was a complex process that involved a number of conflicting influences; articulation of the threat, inter-service rivalry, budget and manpower issues, personalities, mobility and firepower concerns, and the traditional European focus of the Army. These conflicting

influences are in large measure responsible for the confusion that exists within the Army concerning the proper O&O concept for the LID.

Before turning to the current light division, it is instructive to look briefly at the Army's experience with light forces in World War II. By late 1942, several factors led Army planners to consider creating ". . . a light division, capable of jungle, mountain, or amphibious operations."10 Both the Germans and the Japanese had successfully employed such specialized forces and it seemed prudent to incorporate like organizations into the U.S. force structure.11 Additionally, they believed that shortages in strategic lift, primarily shipping, ". . . may dictate a considerable change in our strategic concept with a consequent clange in the basic structure of our Army . . . toward light, easily transportable units."12 As we shall see, this is strikingly similar to the rationale behind the creation of the current light division. The apparent need for units that could solve these issues led the War Department in June, 1943 to authorize the formation of three light divisions. As figures one and two indicate, there were significant differences between the organization of the light and the standard infantry divisions.

There was considerable resistance within the Army to the formation of such specialized formations. This resistance was led by Lieutenant General Leslie J. McNair, Commander of Army Forces, who opposed the formation of specialized units under the assumption "that well trained units could adapt to special requirements". 13 Subsequent training and evaluation of these divisions concluded that the divisions lacked adequate firepower, tactical mobility, and service support and therefore could not conduct the operations routinely assigned standard infantry divisions. However, as one recent study concluded, "Lost in the bureaucratic shuffle of developing a new division was the original rational for a light division--the ability to conduct special operations."14 Unsure of this special purpose, the leaders tasked with training and evaluating the light division operated under the assumption that it should perform as a standard infantry division. That it failed to do so is hardly surprising. The result was that only one of the light divisions, the 10th Mountain Division, served in combat in the

# **US 1944 Light Division**

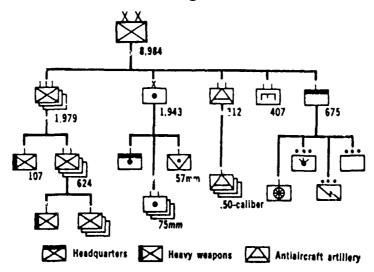


Figure 1. U.S. Army Light Infantry Division, 1944
Source: Shelby Stanton, Oder of Battle: U.S. Army, World War 11, p. 11

# The US Infantry Division in 1944

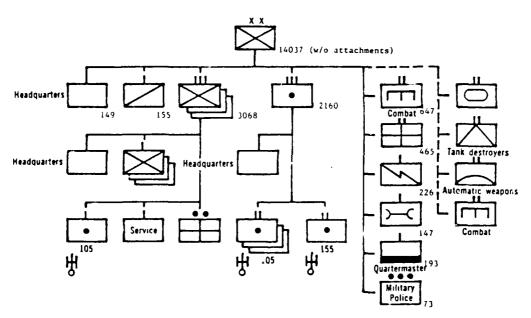


Figure 2. U.S. Army Standard Infantry Division, 1944 Source: J.M. House, "Designing the Light Division," p. 46.

specialized role for which it was designed. The other two divisions were reorganized and fought as standard infantry divisions.

The Army's Ranger units in World War II suffered similar experiences. The Rangers were initially created as light infantry to perform special operations. However, because of their excellent reputation, they were increasingly used in conventional operations. In order to conduct these operations, the Rangers required increased firepower. The result was a "spiral of increased firepower and more conventional missions," which continued throughout the war and gradually transformed the organization of and the tactical role played by the Ranger battalions. 14

#### THE DEVELOPMENT OF THE LIGHT DIVISION

During World War II, our experimental light divisions were abandoned, largely because deficiencies were considered signs of failure rather than challenges to be overcome. We will not allow that to happen this time. CSA General John A. Wickham, 1986

In the years immediately following the end of our involvement in Vietnam, the Army turned its focus back on Central Europe. As a result, doctrine, force development, and budget requests reflected an emphasis on heavy armored and mechanized units. 18 However, in the late 1970's, Army Chief of Staff, General Edward C. Meyer initiated measures to halt He believed that the Army needed more balance and flexibility and in a 1980 White Paper he called for lighter forces to meet threats "to vital U.S. interests outside of Europe." He went on to state that, "The years ahead will increasingly place greater demands on us to project power . . . around the world . . . which requires a spectrum of force."19 The need for such a "spectrum of force" was highlighted by a series of dramatic events in late 1979. The Iranian hostage crisis and the Soviet invasion of Afghanistan forced the Carter Administration and the Defense Department to recognize "the need for including rapidly deployable light flexible contingency forces, infantry divisions."20 While the immediate result was the creation of the Rapid Deployment Joint Task Force (later changed to USCENTCOM), Meyer also proposed a new type division for the ongoing Army 86 studies. This 'light' division would be armed with high technology equipment that gave it the firepower of a heavy division but was more suitable for rapid deployment. The unit selected for this transformation was the 9th Infantry Division and it was soon redesignated the 9th (High Technology) Light Division.<sup>21</sup>

The reasons for Meyer's initiative have as much to do with bureaucratic influences as they do with military ones. In the late 1970's it looked very much like the United States Marine Corps would be greater if not the primary responsibility for rapid deployment. While it would have been militarily unsound to rely exclusively on a one dimensional capability, the senior Army leadership was equally concerned about the budget impact. That fear was not unfounded as the next few years saw the Navy's budget increase while the Army's decreased. The Army lobbied successfully for a greater rapid deployment role by activating the 9th (High Technology) Light Division (HTLD). Manpower and budget cuts, equipment difficulties, burgeoning airlift requirements, confusion over the O&O concept for the division, and strong resistance from several high ranking Army leaders gradually lowered interest in the 9th in the late 1980's. As former Army Chief of Staff, General John A. Wickham recently remarked, "the high-tech light division didn't turn out to be high-tech or particularly light."22

When Meyer retired and General Wickham became the Army's Chief of Staff in 1983, the HTLD lost its sponsor and a new concept emerged. The results of a study Wickham directed indicated the need for light infantry forces to perform power projection and low intensity conflict (LIC) missions which were unsuited to heavy forces. Interest in this area was increasing rapidly among policy makers and Wickham believed that he needed to make the Army more flexible and "more relevant" to a strategic environment in which major conflict in Europe was unlikely.

General Wickham had other reasons which argued for the introduction of light infantry into the Army force structure. Such forces allowed him to seize a part of the rapid deployment mission which had become virtually monopolized by the Marines. In addition, projected reductions in manpower ceilings and shortfalls in strategic lift dictated the need for smaller, lighter divisions. Finally, cuts in the defense budget

meant that the heavy J-series TOE's painstakingly developed over the previous six years of the Division 86 study, were clearly unaffordable. The creation of a number of "rapid intervention, non-mechanized light divisions" answered the need for improved combat power, LIC capability and rapid deployability while it preserved force structure; all at a cost that was lower than the other heavier divisions and without an increase in end strength. Therefore, the light divisions were promoted as a cost effective method to retain force structure and modernize divisions that might have gone unmodernized or eliminated altogether. 23

Backed by Defense Department officials and the Secretary of the Army. John O. Marsh, General Wickham "directed TRADOC to develop a light division design" in August, 1983. His guidance for the initial design of the division was that it would contain about 10,000 soldiers of which half would be infantrymen, have nine maneuver battalions, and be deployable in approximately 500 sorties. This directive was enlarged into the "Army of Excellence" study which was an effort to align the Division 86 structure with budget realities and the new doctrine of AirLand Battle.<sup>24</sup> In October, 1983 after less than three months, Wickham approved the first of several designs for the LID.<sup>25</sup>

The Army now faced a major redirection of its modernization effort as one critic bluntly summarized, "The J-Series force, six years in its carved up in six weeks."26 Yet, for the LID, the design. was consequences of the AOE recommendations go far beyond force modernization issues. The Concept Based Requirement System (CBRS) design was "compressed and methodology normally used in force accelerated" during the AOE LID study. Consequently, the final AOE report raises considerable doubt concerning the design of the LID and the missions for which it was created,

While the normal design process identifies the requirement for a force design through analysis of threats and construction of a Battlefield Development Plan (BDP), the initial impetus for the Light Infantry Division requirement was provided [by General Wickham]. . . [Because there was no operational concept] The TRADOC Commander (GEN Richardson) directed the Combined Arms Center (CAC) to ensure that the concept development process was conducted concurrently with the design process. . . A key difference in the division's design process and the concept based methodology was the absence of a formal analytical effort in assessing the design. The truncated methodology did not provide time for formal analysis/assessment.<sup>27</sup>

Despite these misgivings, the 7th Infantry Division was designated as the first of five divisions (four active and one reserve component) to convert and begin training in the new light configuration.

The current organization of the LID (figure 3) directly reflects the initial guidance contained in General Wickham's White Paper 1984. It consists of 10,778 soldiers and it is deployable in 516 C-141 sorties. Furthermore, the division has a greater 'tooth-to-tail' ratio than any other division in the Army. The divisions primary close combat maneuver unit is the light infantry battalion (figure 4). Like the division its organization is equally austere. However, one controversial issue in the organizational design of the LID and its subordinate units was the directive that the designers "make organic those assets and functions that would always be needed. Those assets and functions which would be only occasionally required were to be passed to corps or echelons above corps (EAC)."28 A number of critics believe that Wickham's guidance has resulted in a division structure that represents a dangerous compromise between combat power, sustainability, and strategic lift. General John Bahnsen suggests that the abbreviated design process and the maximum sortie criteria drove the design effort rather than a clearly articulated operational requirement,

The Army of the 1980's, seeing its joint partners failing in their end of the strategic mobility contract, took a new turn-it decided to lighten the load. Thus in 1983 the light division was born, its principle design feature being that it could be squeezed into 500 C-141 sorties. Why 500 was the key number, or what capability the division would have upon arrival in an operational theater, were issues that were dealt with only after the total load requirement was squeezed into the preordained box. . . Thus it has come to pass that the strategic mobility tail is wagging the landpower dog.<sup>29</sup>

In an effort to gain a larger part of the force projection mission and by direct implication a larger share of the defense budget, the Army had developed a new force with questionable strategic flexibility to meet a variety of new but ill-defined threats. As we shall soon discover, the confusion and controversy has not diminished concerning the role and missions that LID has been assigned.

#### LIGHT INFANTRY DIVISION CURRENT 10,778 PERSONNEL 516 SORTIE 23 MK-19 162 DRAGON DIS -44 TOW HHC 54 60mm MORTAR 36 81mm MORTAR HHE HHC HHC MP 0 120mm MORTAR \_11 54 105mm HOWITZER MNT MI 8 155mm HOWITZER 0 MLRS ш 0 NLOS **⋈** <del>(})</del> BAND 40 STINGER 0 PMS 1 0 OH-58D (ARMED) 30 UH-60 ADA 0 TMT CO AMC 2 LIFT CO ш 81 RIFLE PLT 99 CO SIZE UNITS 22 BN SIZE UNITS 6 BDE SIZE UNITS

Figure 3. U.S. Army Light Infantry Division, 1989 Source: CACDA, "White Paper," p. 20.

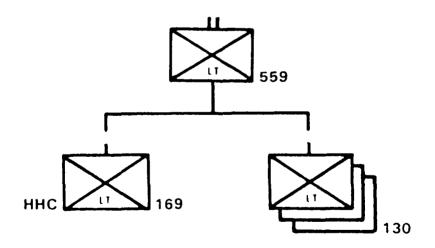


Figure 4. U.S. Army Light Infantry Battalion, 1989 Source: FM 7-72, P. 1-7.

#### III. LIGHT INFANTRY MISSIONS

#### A CONTEXT-ADAPTABLE FORCE

The Light Infantry Division is well suited to provide a Rapid Initial Strategic Capability (RISC) . . . (and) to provide a context-adaptable force which can meet strategic needs without commitment of the nation's strategic force.

CACDA, "Light Infantry Division White Paper," 1989

. . . the light infantry division will leave its bootprint wherever the mission requires.

General John A. Wickham, White Paper, 1984

The most intensely debated issue concerning the LID is what missions should it be assigned. While the initial motivation for the LID was for a rapidly deployable force that could meet threats in non-European contingencies, its primary focus was narrowed "to defeat enemy forces in low intensity conflict." Yet, as the passages quoted above indicate, the LID has always been viewed more as a general purpose force with utility across the entire conflict spectrum rather than a unique unit with specific operational capabilities. Consequently, the uncertainty within the Army concerning the actual operational focus of the LID is understandable.

A major reason for the uncertainty concerning the employment of the LID stems from the confusing signals coming from the Army's senior leadership. In his 1984 White Paper and in a 1985 letter to the commanders of the LID's, General John A. Wickham, then Chief of Staff, states that the primary orientation of the LID is LIC outside the NATO region. A secondary emphasis would be placed on other levels of conflict. The light divisions must be able to fight—anytime, anywhere, and against any opponent. Additionally, in a 1985 article in NATO's Sixteen Nations, he claims that the LID has a major role to play in the high-intensity NATO theater. The Furthermore, General Wickham's comments on the 7ID(L) certification FTX in May 1986 included the criticism that the division was not supposed to be out "chasing VC". He wanted the division to restructure the scenario introducing the "tentacles of mid

to high intensity technology . . . from the very beginning." Finally, it was the conclusion of the 1986 Infantry Conference that nearly all Joint Strategic Capabilities Plan (JSCP) missions, TRADOC school instruction, and wargame scenarios envision the employment of the LID in mid to high intensity European or Southwest Asia settings. A brief examination of the articles dealing with the LID which have appeared in the Army's professional publications over the last four years confirms this emphasis on mid to high intensity conflict. The undeniable conclusion is that the focus for the LID is not on LIC but on 'utility' across the conflict spectrum as a general purpose force or as augmentation for a more conventional theater. 34

"Unfortunately," as a faculty member of the Army War College observes, "the LID (as currently structured) is not likely to be adequate to many of the situations for which it is intended. It may be able to deploy, but it may not be able to survive once deployed." Additionally, while light infantry units are among the most adaptable given time, equipment, and training, these are resources that are precluded by the assumptions of short warning and the need for flexible response. Finally, "attempts to combine great versatility in repertories with rapid responses may simply foster operational dilettantism—with the appearance, but not the reality of economies of force."

While a number of critics claim that the Army has defined the mission of the LID too broadly, a solution that promotes the opposite is equally troubling. There are an infinite number of contingencies that could justify the creation of specialty forces. Creating such forces is not however, a very efficient prioritization of increasingly scarce resources. Ironically, in the early 1960's, the Army wrestled with the same issue. In 1965 at the conclusion of a series of force design studies that included a proposed light division for LIC (interestingly, the term LIC was used then also) the U.S. Army Combat Developments Command recommended against such a move. Citing resource constraints and the limited utility of such context specific forces, the study concluded that standard infantry division must be prepared for non-standard missions.<sup>37</sup>

In a broad context the LID has both a deterrent and a warfighting role. The real difficulty in determining the appropriate missions for the LID is that the United States has not adequately defined its vital interests, a policy for the use of military force, or the environment in which force might be used. Defining a strategy for areas other than Europe that will lead to an acceptable force design is extremely difficult because circumstances vary widely and change too rapidly for consistency. 38 This conclusion was also reached in a study done recently by the Combined Arms Combat Developments Activity (CACDA). They contend that the threat at the lower end of the conflict spectrum has changed significantly since the activation of the LID. The scenarios for which a response may be necessary currently contain few LIC threats while the number of technologically sophisticated combined arms threats have The U.S. maintains a number of force capabilities. To the increased. extent that these capabilities overlap adds flexibility. The challenge is to determine the appropriate balance between capabilities and flexibility and the proper missions for the LID among a number of possible national responses. 39

There are other factors which directly influence the roles assign to the LID. Ongoing studies have identified the need for contingency force projection. However, as already mentioned, strategic lift remains inadequate for even our strategically mobile forces. Additionally, conventional force reduction talks and fiscal restraints may result in drastically reduced force levels. This will require continuous reassessment of risk versus probability. It will also require forces that can be easily tailored to specific threats since multiple types of conflicts can occur at any level of intensity. 40

While context specialization is desired for the LID so that the necessary training, equipment and organization can be more easily determined, extensive U.S. commitments imply that this is an unaffordable luxury. So long as a conflict remains between resources and commitments, the LID will have to remain context-adaptable. It is therefore necessary to reexamine the missions that light infantry forces will likely receive across a conflict spectrum which has changed dramatically since activation of the LID.

### LOW INTENSITY CONFLICT

there simply are no contingency spots on earth in which a LID (Light Infantry Division) could safely be deployed . . ., the LID is neither organized nor equipped to fight a low intensity conflict (LIC).  $^{\prime\prime}$   $^{\prime\prime}$ 

In 1986, an important article appeared in <u>Military Review</u>. Its title asked the question "The Light Divisions and Low Intensity Conflict: Are They Losing Sight of Each Other?" The author argues that there is an apparent redirection of the "doctrinal and functional focus of the light divisions away from LIC toward a more conventional higher intensity role." Today, the answer to his timely question appears to be 'yes' despite the fact that the mission of the LID remains to rapidly deploy to defeat enemy forces in LIC. A consequence of the campaign to sell the 'cost effectiveness' of the LID has been the confusion over the proper operational focus. As a result, one observer has noted that the light divisions currently emphasize employment in contingencies other than LIC.

The majority of the confusion concerning the proper 0&O concept for the light divisions stems from the widespread misunderstanding of what LIC is. One author has recently pointed out that LIC incorrectly implies one type of combat. 44 Many mistakenly equate LIC primarily with counterinsurgency operations. FM 100-20 Military Operations in Low-Intensity Conflict (Final Draft) currently defines LIC in much broader terms.

Low Intensity conflict is a politico-military confrontation between contending states or groups below conventional war and above routine, peaceful competition between states. It frequently involves protracted struggles of competing principles and ideologies. Low-intensity conflict ranges from subversion to the use of armed force. It is waged by a combination of means, employing political, economic, informational, and military instruments. Low-intensity conflicts are often localized, generally in the Third World, but contain regional and global security implications (p. 1-1).

FM 100-20 (Final Draft) reflects a thorough reevaluation of LIC in light of the higher probability of its occurrence and the likelihood of U.S involvement. As a result of this reevaluation, FM 100-20 (Final Draft) goes on to say that in the LIC environment, indirect rather than direct applications of U.S. military power are the most appropriate and

cost-effective means to achieve national policy objectives. The principle military instrument will be security assistance, and combat operations will be employed only as a last resort (pp. 1-2 to 1-3).

As a means of further clarification, the Army's mission in LIC has been divided into four broad catagories; peacekeeping operations, terrorism counteraction, peacetime contingency operations, and insurgency and counterinsurgency (pp. 1-10 to 1-11). However, even this attempt to narrow LIC into more easily identifiable operations leaves planners with contingencies so numerous that organization, training, and the concept of employment of the LID is difficult to determine. There still is no doctrine to focus the LID to meet specific threats in the LIC environment.<sup>47</sup> Therefore, it is essential to determine the LIC missions for which the LID is an appropriate response.

General Wickham further narrowed the focus of the LID by stating that it will be the Army's expert in low intensity combat, which is different than LIC. The LID was also tasked to revive and expand the Army's expertise in low intensity combat skills. 48 Consequently, while the LID can be employed in all LIC catagories, it is especially suited to peacekeeping functions and peacetime contingency operations such as strikes or raids and demonstrations or shows of force. It is also has utility in phase III (war of movement) insurgencies. 49

While an in depth examination of each of these missions is not possible here, a brief discussion of each is helpful in identifying the specific missions of the LID. Peacekeeping operations are "military operations conducted with the consent of the belligerent parties to a conflict to maintain a negotiated truce and to facilitate a diplomatic resolution." An important feature of these operations is that the peacekeeping force is not allowed to use force except in self-defense (pp. 1-11 and 4-1). An example is the multinational force currently stationed in the Sinai. While the light forces will continue to shoulder the burden of the peacekeeping mission because of the ease of deployment and because of their relatively inexpensive upkeep, it is not a mission uniquely tailored to their abilities. The recent participation by other army forces demonstrates the generic requirements of this mission.

Another form of peacekeeping is peacemaking. In this case, while the

ultimate objective is to maintain a peace, it must be achieved first. An example is the U.S deployment to the Dominican Republic in 1965. The conduct of peacemaking operations employs procedures and techniques similar to contingency operations discussed below (p. 4-17).

Peacetime contingency operations is another category of LIC where the LID has a mission. These operations are "politically sensitive military activities normally characterized by a short term rapid projection or employment of forces in conditions short of war (p. 5-1)." This category includes intelligence operations, counter-drug operations, unconventional warfare (UW), rescue and recovery operations, strike operations, and demonstrations or shows of force. As one author has pointed out, peacetime contingency operations are difficult to visualize because there are so many possibilities, each requiring the employment of different types of forces. The LID will most likely be employed in only a few of these scenarios; strikes, demonstrations and shows of force, and non-combatant evacuation. The unifying characteristic of these missions is the requirement for a rapid mobilization of effort.

Strike operations are the most conventional of the LIC missions. They range from the Libyan airstrike to URGENT FURY. Because strike operations are usually short violent operations, they normally require forced entry. Since the LID does not have this capability, it must be employed in a follow on role for a larger joint task force. Depending on the threat, the LID may require significant combat augmentation. In such cases the LID will "be neither light nor rapidly deployable." 51

Demonstrations or shows of force are operations intended to show U.S. resolve or to deter a potential opponent. It would not be incorrect to say that the LID's were activated with this mission in mind. As General Wickham stated in his 1984 White Paper.

. . . an important need exists for highly trained, rapidly deployable light forces. . . Their rapid deployability will allow them to arrive in a crisis area before a crisis begins. By demonstrating U.S. resolve and capability, they may well prevent the outbreak of war. 52

However, both in the case of strikes and demonstrations, the LID faces potentially stronger and more heavily armed opponents that are not

likely to be impressed with the capabilities of the LID. As General Vuono pointed out earlier this year, there are over a dozen developing nations that have over a thousand tanks and an equal number that possess sophisticated missile technologies. So While "the LID may have more teeth to tail, but the teeth may not have enough bite."

The most controversial LIC mission is that of counterinsurgency (CI). While the initial motivation for the LID was rapid force projection, there was equal interest in developing a credible CI force in the wake of our Vietnam experience. Early studies of the LID listed this mission as a high priority. However, there is considerable controversy over whether this should be a legitimate mission for the LID. FM 100-20 that tactical operations by U.S. combat forces against insurgents will only be conducted in rare circumstances and only if there is a high probability of decisively altering the situation. Critics claim that even under these circumstances, the introduction of U.S. troops is an indicator that the host government has already lost. If the LID is employed, it will be used in security operations and to interdict external support to the insurgents. However, the presence of light forces does not guarantee that combat can be restricted to lightly armed insurgents.55

These factors notwithstanding, except for a brief period in the initial phase of a JRTC rotation, training in counterinsurgency techniques does not occur. It is too hard to conceptualize and replicate in peacetime. Yet, our experience in Vietnam provides demonstrative evidence of the consequences of failing to prepare for counterinsurgency operations. Noted historian Russell Weigley warns that,

trained in the waging of counterinsurgency war-trained so they could and would venture quietly into the enemy's country where American forces would rarely go . . . the insurgency (in Vietnam) might have been suppressed rapidly . . . The mere possibilities of what a substantial force trained in counterinsurgency war might have accomplished (and) . . . the susceptibility of the Third World to insurgency may well imply a need to create American forces specifically tailored and trained for counterinsurgency. 50

The U.S may be forced to employ combat troops in a counterinsurgency role. Also, current policy makers may not subscribe to established CI doctrine. In either case, light forces are an ideal force for this

role. The LID should therefore, consider CI as likely mission.

#### MID AND HIGH INTENSITY CONFLICT

In mid to high intensity scenarios such as Southwest Asia or NATO, . . . light infantry divisions can be assigned missions which will free up mechanized and armored elements for decisive employment elsewhere on the battlefield.

General John A. Wickham, White Paper 1984

FM 100-5 Operations makes no clear distinction between mid (MIC) and high intensity conflict or the missions of light forces in these environments. This has been complicated by the theory of horizontal escalation which postulates that conflict along the entire spectrum can occur concurrently in many theaters in response to the outbreak of conflict in one theater. Others correctly note that elements of all three levels of conflict can occur in one theater. Nevertheless, there has been considerable debate concerning the contribution of light forces to MIC and HIC. This while it is not possible to develope the merits of these arguments here, they are directly related to General Thurman's tasking to 'thicken' the LID. Thurman's intent was to make the LID more attractive to NATO and contingency corps commanders.

When the requirement for rapid deployment surfaced in the late 1970's, the Middle East represented the most likely MIC scenario. While the 'light' force envisioned for this scenario never materialized, the current LID is earmarked for contingencies of this kind. However, as noted above, likely opponents in these theaters are considerably more modernized than they were even a few years ago. Therefore, in MIC, the LID will conduct operations against an enemy more heavily armed and armored than in LIC. Based on this criteria, the Falklands War was an example of MIC rather than LIC. Future MIC scenarios envision similar immature contingency theaters in addition to the Middle East and Korea.

Upon arrival in the theater, the LID secures initial objectives and establishes a secure lodgement area out of range of direct and observed indirect fires. Reconnaissance and security elements operating beyond the lodgement collect enemy information, provide early warning, and facilitate future operations as a complement to other forces or in

support of the LID. The intensity of combat in MIC will depend on the voluntary restraints of the belligerents.

High intensity conflict generally equates to conflict in Europe. Predictably, it is the kind of warfare that the Army has examined the most thoroughly. Our force structure and doctrine reflect its dominating influence. HIC will be waged primarily by mechanized and armored forces on a carvas of AirLand Battle against a backdrop of 'maneuver warfare.' As a result, many observers doubt the utility of the LID in HIC.

Nevertheless, since the activation of the LID, a plethora of articles, theses, and monographs have been written attempting to define a role for the LID in HIC. Unfortunately, according to Colonel Huba Wass de Czege, very little that is useful has appeared in doctrinal publications about light infantry employment in MIC or HIC. Additionally, he believes that the training of light forces for HIC does not include the type of missions that would be most useful in Europe. Finally, in contrast to the Wickham passage quoted above, Wass de Czege contends that light infantry should not be considered as a substitute for heavy forces but as a complement; providing both depth and dimension. The

Light infantry can be employed in Europe in one of two roles. The first and least preferred is as modified "regular infantry." This traditional approach attempts to seize or hold terrain by sustained action seeking a decision before the end of an engagement. In these situations, light infantry must be augmented with heavy forces, longer range antitank fires, and transportation. While the traditional "regular infantry" role is appropriate for much of the terrain of Europe, the current LID is not well suited for these tactics. 50

The second role for light infantry is as "classical light infantry" in complementary roles. These include screening, covering force, and stay behind missions, rear area operations, and various offensive missions. In the defense, classical light infantry denies easy access through large tracts of compartmented urban and forested terrain in an economy of force role allowing heavier forces to be used elsewhere. The light approach is to orient on the enemy, using terrain to gain relative mobility and protection without actually holding terrain. 40

Using road blocks and ambushes the LID can delay the passage of Pact forces and strip away his reconnaissance, ADA, radio electronic combat, and artillery forces. He is then forced to dismount and fight through or use 'Desant' forces in the close battle rather than in depth. These techniques also prevent heavier forces from being fixed by secondary attacks. The objective is to defeat the enemy's plan rather than his forces by upsetting the tempo of his operations. And in shaping the battle, light infantry provides opportunities for concentration and counterattack by heavier forces.

In the offense, the preferred method of maneuver for classic light infantry is infiltration to disrupt the enemy defenses and facilitate the attack by mobile forces. This can also be accomplished by air assault. Even in the defense, the LID should be used offensively to recon counterattack routes, conduct spoiling attacks, or precede a counterattack by infiltration. Finally, the LID can play a major role in rear area operations.

The LID is well suited to these tactics and it requires no augmentation at battalion level. Furthermore, the effectiveness of these tactics has been proven at the National Training Center (NTC). The Soviets have initiated a major reassessment of their infantry training creating at the same time their own equivalent of the NTC as a result of their experiences against classical light infantry in Afghanistan. 43 Yet, in performing these missions, the worth of the LID is not measured in enemy echelons defeated but in what it does to enhance the combat potential of larger forces and their ability to defeat the enemy. 44

Unfortunately, as Colonel Wass de Czege points out, the doctrine for the employment of the LID in classical light infantry roles in HIC or MIC is not fully developed or understood at all echelons. As a result there is a great temptation to employ the LID in the traditional regular infantry role. This is verified by observations of the Battle Commanders Training Program, SAMS operational exercises, CGSC tactical instruction, and NTC rotations. While both roles are necessary, it is doubtful that one organization can accomplish both. Efforts to 'heavy up' the LID so that it can do both, may result in a useless hybrid.

#### EXPECTATIONS. CAPABILITIES. AND ORGANIZATION; THE TACTICAL LEVEL

Light infantry divisions will be "terrain-using" forces, expert in camouflage, skilled in counter-mobility techniques, and quick to seize advantages afforded by their tough and spirited soldiers. The divisions' forte will be operating at night or under conditions of limited visibility. even on defensive missions on close terrain or built-up areas, light infantry forces will habitually ambush, attack, and counter attack.

General John A. Wickham, White Paper 1984

While a number of critics have suggested specific improvements for the LID's deficiencies, none have concentrated on the major source of the its combat power, the maneuver battalions. Therefore, having identified its roles and missions, it is necessary to evaluate whether the light infantry battalion (LIB) has the capability to conduct these missions as currently organized (figure 5). To do this, I will employ the principles of tactical organization developed by Major Glenn Harned in his examination of the Army's force design process. He concludes there are two fundamental principles which govern tactical organizations; economy of force and unity of effort. From these he subordinate principles; flexibility, integration, five standardization, resiliency, and continuity. 4 While his principles favor heavy forces, they remain useful in analyzing the LIB to determine its capabilities to meet demands across the conflict spectrum.

Harned contends that difficulties in determining the most appropriate force structure are greatest when the unit must operate in a variety of theaters against a number of potentially different enemies. 47 From the preceding discussion, it is quite clear that the roles assigned to the LID are extremely diversified. It can anticipate employment in low, mid, or high intensity conflict. However, at the tactical level there is remarkable similarity in the missions conducted by the LIB. They execute dispersed, decentralized, small unit operations in most weather and terrain, often without continuous positive control from higher headquarters. This results in a small tactical signature. Attack or defense is frequently conducted on a non-linear battlefield in a non-standard fashion that departs significantly from of traditional attrition minded the norms commanders. A premium is placed on the small unit leader's initiative.

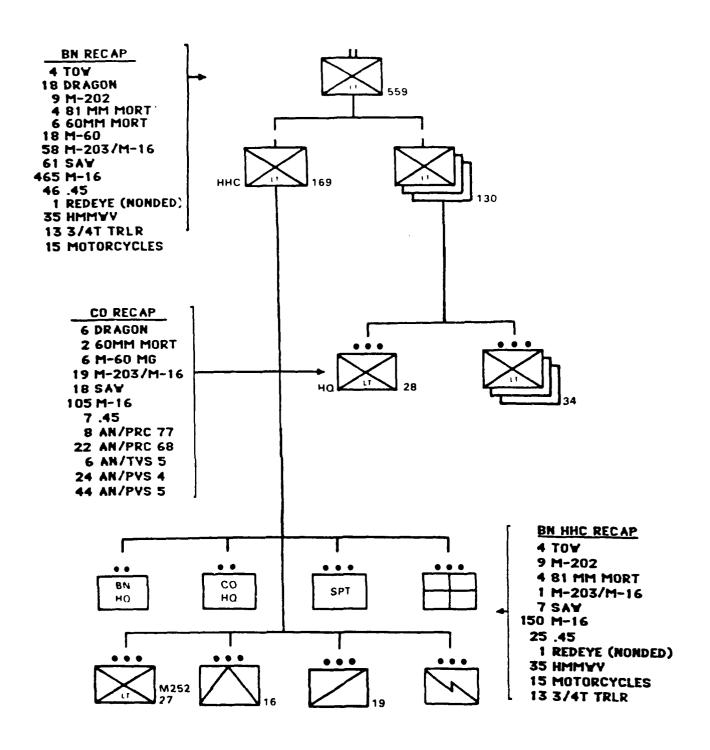


Figure 5. U.S. Army Light Infantry Battalion, 1989 Source: FM 7-72, p. 1-7

This "trust warfare" implies however, a large element of uncertainty that is uncomfortable for many leaders. Yet, results at the NTC and JRTC have demonstrated the efficacy of these tactics and techniques. 48

The first of the fundamental principles is economy of force. Harned defines this as achieving the maximum results with the minimum force. He argues that it is the standard by which all tactical organizations should be judged. From the discussions above, it is apparent that the light infantry forces were created with this principle in mind. The tactical effect of the LIB is supposed to be greater than the sum of its numbers. But economy of force has another major aspect which has been neglected in Harned's definition. Properly understood, economy of force requires the application of minimum essential combat power to achieve desired results. Whether the LIB has adequate combat power is questionable in light of the abbreviated CBRS process which produced it.

As noted earlier, The Army of Excellence (AOE) Study was initiated to bring Army 86 force structure in line with fiscal realities and AirLand Battle doctrine. An atmosphere of austerity led to reductions in the heavy forces, in part to provide manpower for the newly created light divisions. Yet the force design for the LID reflects the influence of more powerful factors than economy of force. The division would not exceed 10,000 soldiers and it would be deployable in 500 sorties. Most critics believe this demonstrates that the primary considerations were lift rather than missions, capabilities, or economy of force.

Consequently, some observers contend that the solution to this initial design error is more firepower and mobility so that the battalions are stronger and more survivable on the battlefield. But Edward Luttwak warns.

Because the reason for being of the Light Division arises precisely from the need to transcend the deployability and operational limitations of standard formations, its potential combat deficiencies cannot be remedied by adding reinforcing elements with heavier/complex equipment. Instead the equipment limitations must be overcome by (a) achieving context-adaptability through structuring and training process... and (b) exploiting that quality by appropriate tactics, within operational schemes. The alternative solution, to add heavier extra-divisional reinforcements, would have no logical stopping point until full equipment parity is attained with the standard formations-which would entail the re-emergence of the original deployability and operational limitations.

If this occurred, the concept of economy of force would be sacrificed.

What Luttwak's comment implies is the need for a different solution to the deficiencies in combat power within the LIB's current organization. Like the German army's approach to the stalemate on the Western Front in World War I, the LIB's deficiencies may require a human solution. With 570 soldiers, the LIB is still very weak in manpower in comparison to its World War II (871) and ROAD (849) predecessor's; although it has greater rifle strength (243) than the current J-series mechanized battalion (216). Such austerity is not economic in 'come as you are conflicts that are characterized by short notice, rapid deployments. A more robust and a more survivable battalion is needed in an environment of continuous operations, often against numerically superior opponents.

The second fundamental principle is unity of effort. This is "the economic expenditure of combat power in the pursuit of a common objective." \*\* It is produced by synchronizing the battalions combat power which in turn requires integration of the battlefield operating systems into planning and execution of operations. In decentralized operations this is very difficult to achieve. Reliance must be placed on the initiative produced by the mission statement, commander's intent, and concept of the operation. \*\* However, the LIB like all units operates on a 360 degree battlefield. Therefore, a significant portion of the battalion's strength is diverted to protecting its own combat and service support systems or those of a higher headquarters. While General Vuono considers the LID to be "infantry-rich," the diversion of soldiers to security functions reduces the combat power available for direct combat operations. Consequently, unity of effort suffers.

The austerity of the LIB's organization is also evident in the scout platoon. Results from the NTC and JRTC emphasize the increased importance of reconnaissance and counter-reconnaissance to success in battle. With only three dismounted squads in the battalion scout platoon, the battalion must supplement this effort with infantry from the rifle companies. This places further strain an already lean organization. Operating with other army forces on an "amoeba like battlefield", the LIB cannot afford to operate on so narrow a margin of

infantry strength. Consequently, while light infantry forces add a significant capability to the Army, the LIB's ability to unify the efforts of forward deployed and contingency forces is questionable.

From these fundamental principles, Harned developed five subordinate principles of tactical organizations. The first of these is flexibility which he defines as "the ability of an organization to adapt to a particular situation and the degree to which its TO&E facilitates task organization in combat. Harned also contends that the more fixed the organization, the less flexible it is. 77 At the strategic and operational levels of war, this is the theoretical purpose of the LIB as a context-adaptable force. As General Vuono recently stated, "(the light division) can be deployed rapidly and tailored for operations across the entire spectrum of conflict." This is not true at the tactical level. Unlike, the heavy forces, the LIB will generally enter combat or a contingency area as a pure organization reinforced only by combat and combat support assets from the division. However, if the LIB needs further support, it will be "augmented" by heavy forces and CSS assets. Forgetting for a moment the problems of additional deploying the "heavied up" LIB and the incompatible support structures of heavy and light forces, the triangular organization of the LIB does not facilitate task organizing with the square organization of the heavy J-series battalions. Furthermore, a number of authors have pointed out that augmentation is in reality a resurrection of "pooling" which was largely discredited in World War II. 79 Finally, the LIB's have expressed concern over concept augmentation because they have not established any habitual training relationship with any non-divisional units which might provide support. o The LIB is therefore not as flexible as it is expected to be.

Integration with operational doctrine is another weakness in the current design of the LIB. To provide unity of effort and to achieve economy of force, operational and tactical requirements must drive force design. Similarly, organizations should be designed based on their battlefield functions and the doctrine for their employment. The confusion and controversy that exists concerning the proper O&O concept for the LID has already been pointed out. In the case of the LID and its

subordinate battallons, sortle requirements had a larger impact on force design than did operational requirements. This has resulted in dangerously austere battallons for the reasons previously mentioned.

The third fundamental principle, standardization, seems at first glance to conflict with the principle of flexibility. In combat however, standardization actually contributes to flexibility and facilitates synchronization. This is evident in force design as well as logistics and training. Battle drills, common staff practices, and standardized equipment all contribute to improving unit agility. For the LIB, standardization is reflected in the simplicity and austerity of the organization. This has been achieved by eliminating heavy weapons and equipment; cutting fat and keeping muscle. The question that remains however is whether that muscle has been organized properly. In this regard, comparison between the AOE heavy and light battalions is particularly puzzling. While they have a similar company structure of three platoons each, they have a different number of companies. The criteria of four maneuver companies was a specific design parameter for the AOE heavy battalions that was apparently not considered when the LIB was designed. The apparent answer to this curious omission is once again the sortie and end strength constraints. This lack of standardization briefly mentioned above, will make it difficult to cross attach units and operate as combined arms teams as Wickham initially intended. ex

Resiliency is the capacity of an organization to engage in continuous operations. This requires a robust and redundant organization able to absorb combat losses and remain combat effective. This is the greatest weakness of the LIB. The operational motivation for light infantry forces is properly trained and employed "soldier power" can compensate for deficiencies in firepower. \*\* In making the LID fit into 500 C-141 sorties, AOE force planners design a battalion that can absorb relatively few casualties before its combat effectiveness is degraded along with its ability to operate in continuous operations. For this to be viewed in its proper perspective it is also important to remember no unit can maintain full strength even in peacetime. Together with an austere casualty evacuation structure, and a meager replacement system, these points suggests that the LIB is only manned sufficiently for

contingency operations of short duration and low intensity.

subordinate principle is continuity. This principle The final requires that organizational turmoil be kept at a minimum for self evident reasons. Since its inception however, the TO&E of the LIB has undergone almost constant change. What has remained firm has been the 500 sortie deployability requirement and 10,000 man end strength. Originally intended as general design criteria, they have been become firm design imperatives. Yet the division is unlikely to deploy as a unit. Instead elements of the division will deploy in specially tailored brigade or battalion packages. The initially deployed units will require sustainment sorties at the same time that the remaining elements of the division are closing in the contingency area. This will surpass the 500 sortie limit quickly. Therefore, the current LIB structure should be considered a base upon which capabilities are added or modified as the conflict environment changes. If strategic lift continues as the major design priority rather than a balancing deployment with mission capabilities the LIB risks becoming "a specialty force inappropriate to all but a narrow range of scenarios and an all purpose force that cannot respond to specific situations. 94 The conflict environment has changed since the creation of our light infantry forces, and the LIB must change with it.

#### IV. HISTORICAL EXAMPLES

It is significant that the US is the only member of the American, British, Canadian, and Australian Standardization Countries (ABCA) which has a three company battalion.

Evaluation of U.S. Army Combat Operations in Vietnam, 1966

In considering alternatives for "thickening" the light division and battalion there is considerable value in examining earlier organizations and their performance in combat. For the purposes of this study, two examples have been chosen. The first of these examples—the U.S Army infantry battalion in Vietnam—examines combat in low to mid intensity conflict. The second is an example of conventional operations in mid intensity conflict; 2d Battalion, the Parachute Regiment in combat in

the Falklands in 1982. While both were initially organized in a triangular fashion with three rifle companies, circumstances forced the creation of an additional ad hoc maneuver element.

Additionally, a modern example has also been included; the USMC infantry battalion. Except for a short period in the 1970's, the Marine battalion has been organized with four rifle companies since 1957. Together, these three case studies offer contemporary lessons for Army force designers as they adjust the organization of the LIB to meet demands across a constantly changing conflict spectrum.

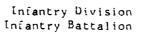
#### VIETNAM-LOW TO MID INTENSITY CONFLICT

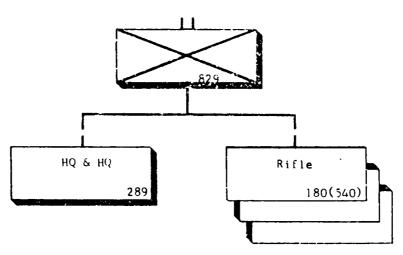
Having been exposed to the full effect of triangular battalions for some months in Vietnam, we will limit ourselves to saying that it is a miserable organization . . .

Lieutenant General Julian J. Ewell Major General Ira A. Hunt, Jr. Vietnam Studies: Sharpening the Combat Edge

Beginning in May, 1965 U.S Army combat units deployed to Vietnam and initiated operations against the Viet Cong (VC) and North Vietnamese Army (NVA) regulars. With the exception of airmobile and airborne units, most battalions were organized under the 1963 ROAD tables of organization (Figure 6). Recently created after a brief flirtation with the Pentomic organization, the ROAD reorganization represented the return of the triangular concept from World War II and the emergence of the maneuver battalion as the basic building block of the division.

As in previous conflicts, the Army believed that implicit in the commitment of combat forces was the requirement "to promptly evaluate the suitability of existing doctrine, material, and organization for operations in Vietnam." Consequently, the U.S Army Combat Developments Command sent a team consisting of experts from across the Army to Vietnam in January 1966. Their task was two fold; to determine the comparative effectiveness of maneuver battalions and to provide recommendations for changes to increase their efficiency. They examined several areas and after collecting data on nearly 60 battalion level operations, they issued their report in April of 1966.





	•	
VEHICLES	WEAPONS	COMMUNICATIONS
. ARAAV XM551	25 Mg 7.62mm	EQUIPMENT
69 Trk 1/4-Ton	13 Mg .50 Cal	4 AN/GRR-5
39 Tck 3/4-Ton	17 Lchr Rkt 3.5"	27 AN/VRC-46
13 Trk 2 1/2-Ton	9 Mort 81mm	31 AN/GRC-125
2 Trk 5-Ton	4 Mort 4.2"	51 AN/PRC-25
! Trk Shop Van	18 Rifle 90mm	54 AN/PRC-6
2 1/2-Ton M109	8 Rifle 106mm	I AN/GRC-142
35 Tlr 1/4-Ton Amph	3 ENTAC	
35 Tlr 3/4-Ton		
20 Tlr 1 1/2-Ton	CTHER	
	4 Radar Set AN/PPS-4	

Figure 6. U.S. Army Infantry Battallon, ROAD, 1964
Source: U.S. Army Combat Developments Command, Road Evaluation, Book II

2 Radar Set AN/TPS-33

In looking at battalions from the 1st Infantry Division, 1st Cavalry Division (Airmobile), 173d Airborne Brigade, and the 3d Brigade, 101st Airborne Division, they determined that three basic types of operations were performed. The first type is the well known "search and destroy operation which was designed to discover NVA and VC bases and to destroy their forces. The other operations were clearing operations which were designed to drive enemy forces out of an area, and securing operations which placed more emphasis on seizing and holding critical terrain. The evaluation team made recommendations in a number of areas based on observations substantiated by data from countless interviews, after action reports, and questionnaires. We will concern ourselves only with the recommendations on the organization of the infantry battalion.

The infantry battalion, which consisted of three rifle companies, was specifically examined to determine if the was organized "to generate maximum combat power in Vietnam." The evaluation team's basic operating premise was that the ultimate determinate of the maneuver battalion's adequacy was its performance in combat." As others had observed, operations in Vietnam were "a mixture of conventional and unconventional warfare and jungle and urban combat. 97 Furthermore, due to the nature of operations in Vietnam, the team found that the battalions were forced to perform a number of operations simultaneously. These included reserve/reaction, and searching, blocking, security forces. They concluded that the effectiveness of these operations depended on fielding the maximum number of rifleman. Yet, several factors undermined the ability of the battalions to achieve sufficient "paddy strength." Due to the environment and to the nature of operations, casualties were very high. Security requirements for battalion, brigade, and fire support bases also served to drain rifle strength. As a result, companies organized with 180 soldiers often operated with only 65 to 70.88 Finally, with each operation consisting of so many simultaneous tasks, these under strength triangular battalions could not normally hold out a reserve/reaction force. Consequently, the company least likely to be decisively engaged was designated the reserve.

The evaluation team's report concluded that doctrine and equipment were basically sound. However, changes were necessary in the organ-

ization of the infantry battalion, "There is a sufficiency of data to prove that the battalion-the Army's basic fighting unit in Vietnam-suffers one serious shortcoming: it lacks sufficient rifle strength for operations in Vietnam." Nearly every commander had taken similar action to fix the problem. On most operations, they formed a composite company from combat support personnel in order to provide more rifle strength and an additional maneuver element. The report stated,

It would be a mistake to view these composite elements in any other than their true light. They are expedients necessarily employed by their commanders to alleviate a glaring deficiency in battalion organization. The men in these organizations are not trained primarily as riflemen and they lack the leadership, cohesion, and teamwork which characterize a combat ready rifle company and platoon. In the truest sense of the word they are "bastard" units which have been jerry -built to act in a stop gap capacity. 90

To correct this deficiency, the evaluation team recommended that the maneuver battalion be reorganized with a fourth rifle company. This was fully supported by General William C. Westmoreland, the MACV commander,

I strongly endorse the addition of a fourth rifle company to each maneuver battalion . . . the net gain in combat power-represented by greater foxhole strength, increased maneuver flexibility, and improved security-will be double the additional investment of personnel resources. ? 1

The report was then forwarded to the Army Chief of Staff for his review.

It is interesting to note that at the same time as the Vietnam study was taking place, U.S Army Combat Developments Command was conducting a parallel study on the ROAD O&O concept. This study reached the independent conclusion that the four company battalion was a necessity for all infantry, airmobile, and airborne divisions and separate brigades. ? In addition to the observations made in Vietnam, this study stated that the three company battalion did not provide an optimum cross-reinforcing capability. Conversely, the four company battalions operations on two or more axes and cross-reinforcement by providing a greater number of options. Furthermore, while the addition of one more company represented a 25% increase in personnel, it increased the battalion's firepower by

over a third. The resulting report concluded by stating that "Adjusting the maneuver battallons in this way significantly increases firepower over current organizations and retains the balance of forces necessary to permit added flexibility for cross-reinforcement." This brief conclusion addresses nearly every principle of tactical organization developed by Major Harned.

Permission was soon granted to reorganize battalions with an additional rifle company on a permanent basis. Eventually all infantry battalions in Vietnam with the exception of mechanized infantry and riverine battalions were reorganized under modified TO&E's with a headquarters company, four rifle companies, and a combat support company (Figure 7). This was completed by the end of 1968.

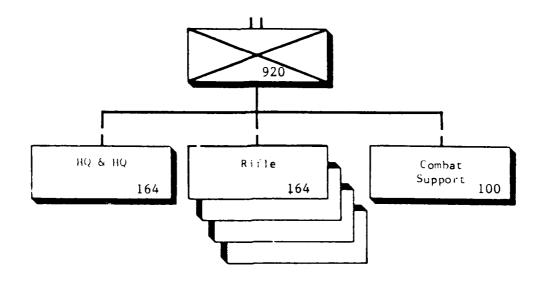
## THE FALKLANDS-MID INTENSITY CONFLICT

. . . The Falklands once again demonstrated that the ultimate outcome of a war is determined on the ground. The Royal Marines and the British Army won on the ground. The Royal Navy could have lost the Falkland Islands Conflict at sea, but could not have won it. Such is the nature of modern war.

Admiral Harry Train, former Supreme Allied Commander Atlantic, 1988

On 2 and 3 April 1982, Argentine forces initiated military operations against the British held Falkland Islands by conducting successful airmobile and amphibious assaults against the small Marine detachments located at the capital of Port Stanley and South Georgia Island (Figure 8). After diplomatic efforts failed to resolve the conflict, the British launched a major joint operation between 12 April and 14 June that succeeded in retaking the islands. It is not possible nor necessary to recount the details of the British operation in the Falklands. The discussion will focus instead on the successful seizure of Darwin and Goose Green by the 2d Battalion, The Parachute Regiment on 28 May. 95

After landing and securing the lodgement at San Carlos Water as part of 3 Commando Brigade (3 Cdo Bde), 2 Para was ordered to capture the settlements of Darwin and Goose Green. The settlements were considered important for several reasons. They lay on the southern flank of the route leading to Port Stanley and therefore posed a serious threat to



# Vehicles

- 9 2 1/2 Tn Trk
- 8 3/4 Tn Trk
- 33 1/4 Tn Trk

## Weapons

- 26 7.62 mm M60 MG
- 110 40 mm M79 GL
- 745 5.56 mm Mlo
  - 4 4.2 in Mortar
- 12 81 mm Mortar
- 8 90 mm RR

Figure 7. U.S. Army Infantry Battallon, Vietnam, 1968 Source: Shelby Stanton, <u>Vietnam Order of Battle</u>, pp. 52-53.

the main effort. Additionally, there was clamor at home for a quick success after a series of spectacular naval losses due to Argentine air attacks. Finally, if taken, the Argentine forces on East and West Falkland would be split and out of supporting distance. Consequently, 2 Para moved out from San Carlos on the evening of 26 May with plans to conduct a non-illuminated night attack early on the morning of 28 May.

British intelligence estimated that the Argentines defended the area with an infantry battalion(-) supported by air defense artillery for a total of about 500 men. After the battle the British discovered that there were actually more than 1600 army and air force troops.

Lieutenant Colonel Herbert "H" Jones commanded 2 Para which was organized into a headquarters company, a heavy weapons company, and three rifle companies (Figure 9). For this operation, LTC Jones chose to form an additional company by combining the patrol platoon from the headquarters company and the reconnaissance platoon from the heavy weapons company. He designated it C (patrol) Company. The assault force now consisted of about 490 soldiers in four maneuver elements; A,B,C (Patrol), and D Companies. He was supported by two 81 mm mortars, one Blowpipe (shoulder fired ADA missile) detachment, three 105 mm guns, and naval gunfire from the Frigate HMS Arrow.\*?

Jones' planned the attack in six phases; for any other troops except the paras this would have been far too complicated. In phase one. C Company was to secure routes to the line of departure just north of Burntside House and between Burntside Pond and Camilla Creek (Figure 10). First A then B Company were to attack in phase 2 to seize the first enemy positions at Burntside House overlooking Camilla Creek. In phase three, A Company would continue its attack to seize Coronation Point, while D Company passed through B and attacked south along the western edge of the isthmus toward Boca House. B and D companies would both assault Boca House in phase four. During phase five, A, B, and D Companies would exploit to Darwin and Goose Green while C Company cleared the airfield. Finally in phase six, Goose Green and Darwin would be taken as C Company advanced well to the south.\*

It is clear from the plan why Jones decided to create an ad hoc company from two separate platoons. Jones wanted to maintain the

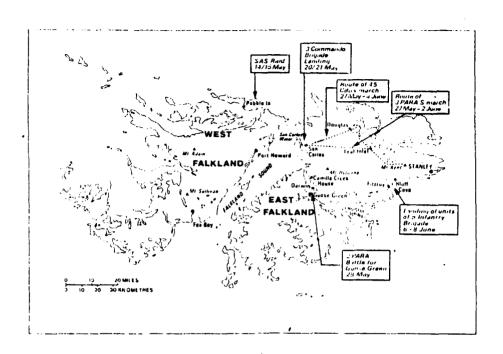
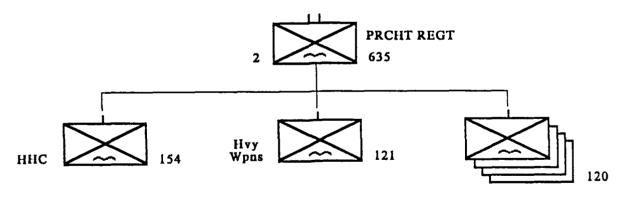


Figure 8. Falkland Islands, 1982 Source: Max Hastings, <u>Battle for the Falklands</u>, Endpapers



## Major Items of Equipment

6 Milan AT Missile Systems 12 M-79 Grenade Launchers 36 General Purpose M.G. 8 81mm Mortars

Figure 9. 2d Battalion, The Parachute Regiment, 1982 Source: Fitter et al., "The Falklands Islands," p. 3-40.

momentum of the advance along both axes to prevent the Argentines from concentrating against either one of them. In the event that the battalion was blocked along one axis, he could mass the remaining three elements on one axis while the fourth acted in an economy of force role tying down enemy forces away from the point of concentration. Such flexibility was possible with four maneuver elements. Therefore, since he had no fourth element, he created one. This organization was a far more efficient use of available resources and gave it added resiliency.

Few operations are ever executed as planned; this one was no different. Yet, in the execution of the attack, 2 Paras' ad hoc task organization also facilitated unity of effort. While it is not possible here to recount fully the actions of 2 Para on 28 May 1982, a brief summary will illustrate this point. The attack proceeded as planned until A and B Companies stalled before Darwin Hill and Boca House, respectively. As dawn approached, Jones worried that the attack would be conducted primarily in daylight. In attempting to get A Company moving again, he was killed and Major Chris Keeple took command. But 2 Paras' task organization now began to pay dividends. D Company passed along B's flank and turned the Boca house defense compromising the enemy positions on Darwin Hill as well. C Company passed through A Company as it consolidated on Darwin Hill and joined D Company in clearing the airfield. Together they continued onto Goose Green while B Company secured the battalion's flank south of Goose Green. By late evening, the Argentines were forced into the town with no hope of relief. The remaining 1200 surrendered to Keeble the next morning. \*\*

While there are a number of factors which account for 2 Paras' success, Jones' decision to create a fourth maneuver unit is clearly one of them. When A and B companies were stalled, Keeble was able to commit D Company to assist B; retaining C Company to exploit success. A Company assumed an economy of force role in tying down Argentine forces on Darwin Hill. When the Boca House-Darwin Hill defenses collapsed, C Company continued the momentum of the advance alongside D Company while A cleared remaining pockets of resistance and B Company secured the flank. There is no better example of economy of force, unity of effort, or flexibility than 2 Para's actions at Darwin and Goose Green.

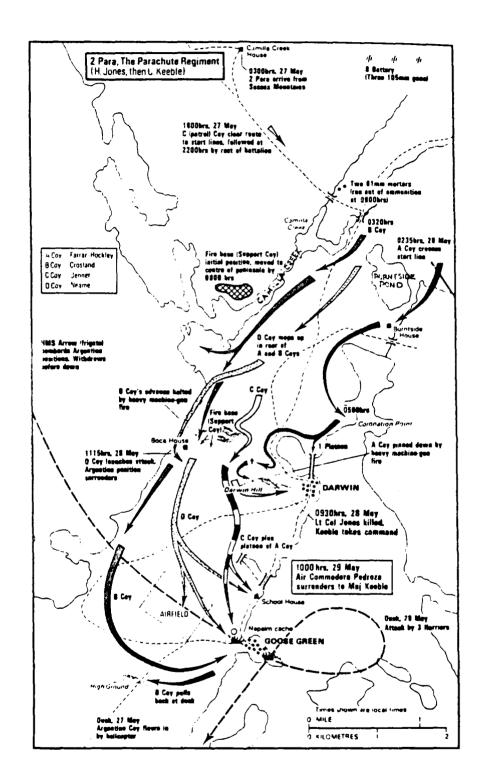


Figure 10. Battle for Darwin and Goose Greene, 28-89 May 1982 Source: Max Hastings, Battle for the Falklands, p. 234.

## THE UNITED STATES MARINE CORPS

The Corps' ambition to be the premier third world force is no secret.

Expeditionary means you have to be light enough to go where you have to go and heavy enough on the other end to win.

General Alfred M. Gray, Commandant, USMC

In January 1988, the Commandant of the Marine Corps convened a force structure study group to develop a balanced "FMF (Fleet Marine Force) Total Force structure for the Marine Corps." Like earlier boards conducted in the 50's and 70's, their purpose was to make recommended changes to the Corps that would enable it to meet the demands of a rapidly changing strategic environment. General Gray's guidance to the study group was to insure that the Marine Corps remains capable of fighting across the conflict spectrum with emphasis on low to midintensity conflict. He further stated that "the active force will focus readiness for employment for low and mid intensity on constant conflicts. The total force will be focused on general war against fully modern, able foes." Concluding six weeks later (this abbreviated design process is reminiscent of the AOE study group), the board recommended thirty changes that will significantly alter the structure of the Corps in the future. One of these recommendations however, the one that is the object of this discussion, represented a return to the past. It was the decision to reactivate a fourth rifle company in the Marine infantry battalion. 100

Since becoming Commandant, as the passage quoted above indicates, Gray has waged a highly successful campaign to make the Marine Corps the force of choice in contingency situations. So successful, that many observers believe that the Army has already lost its bid for a legitimate role in force projection. Critics claim that in order to emphasize the strategic flexibility of the Marines, he went so far as to change the name of its units from "amphibious" to "expeditionary. Regardless of method, Gray's objective is to tailor the Marines Air-Ground Task Force (MAGTF) for an expeditionary future. These thirty changes, collectively known as "Warfighting

Enhancement Initiatives" were joined earlier this year by a series of plans designed to further define the roles, missions, doctrine, and equipment needs for the Marines over the next 20-30 years.

While General Gray is often credited with preparing the Marine Corps for the future, he is actually continuing the efforts of previous Commandants. Breaking with conventional wisdom, General Randolph McCall Pate argued in 1956 that it was unlikely that the Marine Corps would fight in a Nuclear war with the Russians. Instead, he stressed the greater probability of war against communist proxies outside of Europe. He believed that the Corps must increase strategic flexibility as well as take a lead in developing the tactics of vertical envelopment via the helicopter. Issuing guidance similar to Gray's, he tasked a high level board chaired by Major Robert E. Hogaboom to examine every aspect of FMF doctrine and organization. 104

To increase the strategic and tactical mobility of the Marine Division without sacrificing combat effectiveness required substantial changes in organization. The resulting design was characterized by the principles of austerity and mobility. Heavy weapons, armor, and some combat service support functions were moved to echelons above division in order "to attain improved mobility, increased freedom of action, and a homogenous tactical nature." This also facilitated "rapid creation of temporary task groups". Finally it allowed the division to make rapid strategic movements as a force in readiness. These characteristics sound strikingly similar to those desired of the current LID structure.

One of the most enduring changes was the addition of another rifle company to the infantry battalion (Figure 11). The new organization had improved mobility in that it was foot mobile with light equipment that allowed for rapid deployment by helicopter. The companies were equally responsible for reconnaissance which provided the commander with substantial reconnaissance assets. Shock power was also increased by providing another tactical unit and its weapons. Additionally, four maneuver units gave the commander more options and therefore greater flexibility in attack or defense while it permitted him to retain a strong reserve. Finally, the fourth company increased the staying power

of the battalion, allowing the commander to sustain the momentum of the attack.

This was the organization of the Marine Battalions that landed near Da Nang in March 1965. The strengths of the organization were quickly demonstrated in a jungle environment that was often characterized by sustained decentralized operations. The Army's investigation of the effectiveness of its own infantry battalion in Vietnam (ARCOV), based its recommendation for adding a fourth rifle company in part on the "highly successful" performance of Marine battalions. In the early 1970's however, fiscal restraints forced the Marines to man the fourth company in cadre status only.

As part of General Gray's "Warfighting Enhancement Initiatives" the fourth rifle company is being reassigned to each infantry battalion. In addition to getting "more trigger pullers," the Marines believe that the change restores capabilities that are as necessary today as they were in 1956. The first beneficiaries of the fourth company are the eight infantry battalions assigned to the Marine Expeditionary Unit (Special Operations Capable) rotation (Figure 12).108 There are two MEU (SOC)s constantly afloat; one in the Pacific and one in the Mediterranean. In spite of what their name implies, these units are not special operations forces, nor is special operations its primary mission. Its specific purpose is to provide the fleet commander a force capable of rapid response to a wide variety of contingencies. These include amphibious raids, noncombatant evacuation operations (NEO), shows of force, reinforcement of forward deployed or previously deployed contingency forces, as well as other conventional operations. These missions are very similar to those of the LIB. 109

Clearly, the Marines have confronted many of the same issues as Army force designers in the attempt to keep forces strategically, operationally, and tactically relevant to the changing conflict environment. One of the Marines' solutions to "thicken" its combat forces is the addition of the fourth rifle company to the infantry battalion. They are convinced that this measure will provide increased flexibility and the ability to conduct continuous operations in low to mid intensity conflict.

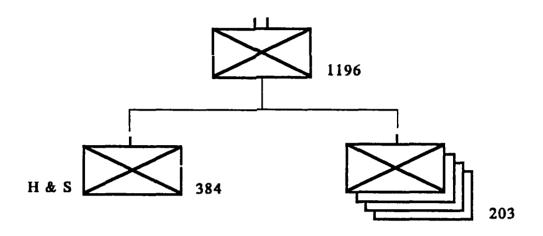


Figure 11. USMC Infantry Battalion, 1957 Source: Marine Corps Gazette, April 1957, p. 28.

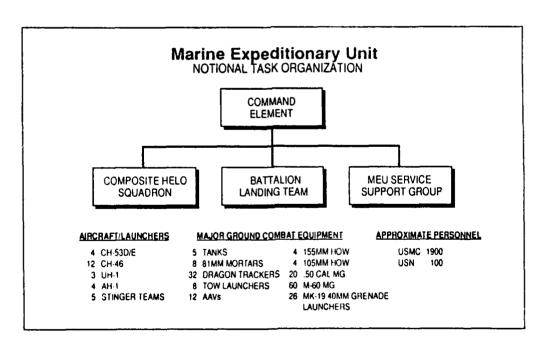


Figure 12. Marine Expeditionary Unit (Special Ops Capable) Source: Special Warfare, Spring 89, p. 30.

## V. RESTRUCTURING THE LIGHT INFANTRY BATTALION

Four subdivisions provide an organization yet more flexible, there being sufficient elements to maneuver around both flanks as well as for fixing and for the reserve. This organization is also useful in penetrations, in which case the entire unit may be used in a deep narrow column, in a square or similar figure, or in a T-shaped formation. A unit of four subdivisions is particularly flexible [because] the four subunits can be subdivided into three or two, according to the situation and the ability of the commander.

Major E.S. Johnston, "Field Service Regulations of the Future", 1936'10

It has been pointed out already that most critics believe that the solution to the problem of thickening the LID is to assign armor and additional antitank and transportation assets to the division. As this paper suggests, there are other possibilities. The division will most likely deploy in packages tailored to the situation. The light infantry battalion is the basic building block of these packages and as such must be structured to meet a variety of situations. An alternative that should be considered is an infantry battalion reorganized with four rifle companies (figure 13). This organization provides for economy of force and facilitates unity of effort more effectively than the current triangular organization. Additionally, as the passage quoted above argues, the four company structure provides tactical flexibility in both conventional, unconventional, and contingency operations. Furthermore, an additional company offers a better balanced tactical structure while at the same time standardizes all maneuver battalions into a square configuration. Also, the additional strength will better enable the battalion to conduct continuous operations. Finally, despite the additional strength, the LIB retains the mobility characteristic of light infantry.

Economy of force is achieved by allocating minimum essential combat power to secondary efforts. Habitually, in the case of the triangular organization, one company each is assigned to the main and supporting efforts. The positioning of the third or reserve company is the only method available to the commander to indicate the main effort. This technique does not really adhere to the spirit embodied in this important principle. Actually, in this situation there is either no

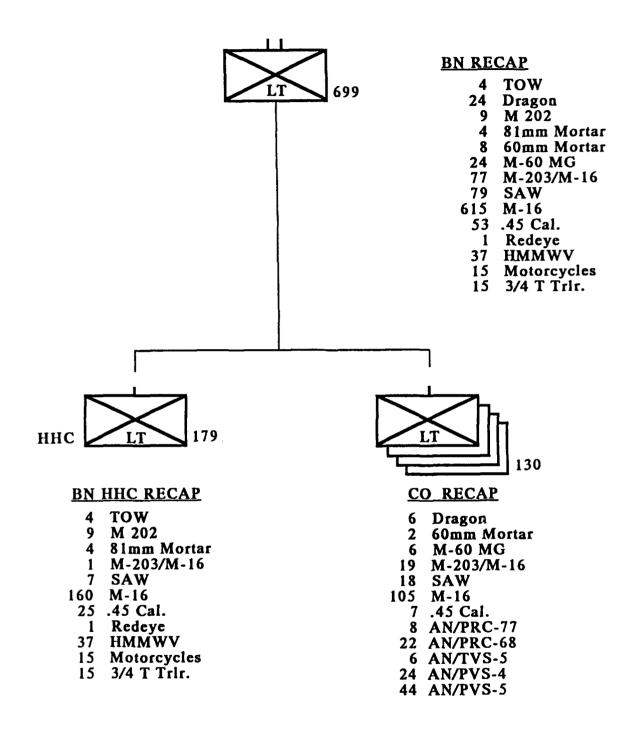


Figure 13. Proposed Light Infantry Battalion w/ 4 Rifle Co's

reserve or two efforts of equal strength.

it is also difficult for the triangular battalion to perform in an economy of force role. Operating in conjunction with other defending forces, the LIB is ideally suited to deny large areas of restricted terrain; freeing mobile forces for other missions. Unfortunately, as it is presently configured it cannot perform this mission adeqately. It simply does not have enough "trigger pullers". The three rifle companies together total only 390 troops. An additional company will increase this total to over 500 while fire power will be increased by more than thirty percent. In the attack, this is a formidable force in the rear of the enemy defenses.

In contingency operations, the LIB acts in an economy of force role by providing a context adaptable force that can be employed without having to resort to the nations' only other strategic forces, the Marines or the 82d Airborne Division. 111 Yet as the Lebanon tragedy clearly demonstrated, increasingly sophisticated Third adversaries are unlikely to be awed by our mere presence or even by massive firepower. 112 The light infantry introduces a different kind of force with a unique tactical style. However, they do not currently posses minimum essential "soldier power" to be perceived as a credible deterrent or as a fighting force. Adding a fourth rifle company rather than heavy firepower would thicken the LIB without compromising its ability to deploy rapidly or its tactical style: in short, without destroying the purpose for which it was created.

Adding another element to the LIB seems at first glance to conflict with the objective of achieving unity of effort. However, the triangular organization invariably forces one company to assume more than one battlefield function. In every tactical situation there is the main and supporting effort, a security force, and a reserve. The square structure of the heavy battalions reflects the recognition of this fundamental point by Division 86 and AOE force designers. One observer claims that it was one of the most significant decisions made by the designers. The was pointed out earlier, in the decentralized operations which are characteristic of light infantry, the reserve is often the unit that is least likely to be heavily engaged. If it

becomes engaged, the commander's options are significantly reduced. If the designated reserve cannot disengage or if it or a newly designated reserve arrives too late, unity of effort is destroyed and the battalion is likely to fail in its mission. Consequently, the LIB not only needs the additional manpower, it also needs the additional maneuver headquarters provided by the fourth rifle company. This additional element helps the commander distribute battlefield tasks more evenly and provides an additional group of leaders to assist in achieving unity of effort within the battalion.

Improved flexibility is the most obvious as well as one of the most significant benefits that is gained by adding the fourth rifle company. In conventional operations the points made above by Major Johnson in 1936 remain valid today, especially on the non-linear battlefield. The LIB commander can provide a weighted main effort, a secondary or supporting effort and still retain a strong reserve. It also provides the commander with additional reconnaissance assets or a counter-reconnaissance force. Both of these functions have increased in importance based on lessons from the Army's training centers. 2 Paras'example in the Falklands provides a strong argument for a LIB with four companies.

In classical light infantry, counterinsurgency and contingency operations, the LIB frequently operates over wide areas. Success requires that constant pressure be placed on the enemy. 114 A fourth company enables the LIB to "saturate" the area of operations without saturating the commander's span of control. For the mission of blocking, clearing, security, and reserve in CI operations, the fourth company is essential as our experience in Vietnam so clearly demonstrated.

By adding a fourth company to the LIB, all maneuver battalions in the Army will be standardized in the square configuration (with the exception of airborne, airmobile, and ranger battalions and I suggest that these recommendations apply to them as well). This will facilitate the development of tactical doctrine and techniques and the creation and employment of combined arms teams. Balance is achieved because the number of battlefield functions no longer exceeds the number of maneuver units. Therefore, no company will be expected to do more than

what is tactically feasible.

Another Division 86 point of emphasis was the requirement that the "redundancy, robustness, battalion task force possess and resiliency." 115 Despite the superior number of infantrymen when compared to its mechanized counterpart, the current LIB does not have sufficient rifle strength to engage in continuous or sustained operations. With nine man squads and only three companies, it cannot sustain even moderate casualties and remain combat effective. Furthermore, as Major Thomas A. McGinnis points out in his work on continuous operations, the commander must recognize that his battalion must "fight over time as well as over terrain." According to McGinnis, units that have been able to operate successfully in continuous operations rotated units through demanding and less demanding missions. The Soviets have adopted and modified this technique in their concept of echelonment. 116 Steven L. Canby reached a similar conclusion in his work on light infantry. He recomme 's a square battalion because of the continual need for fresh troops in continuous and decentralized operations.117

The demands of combat on the triangular battalich do not allow for "redundancy, robustness, and resiliency." While the LIB is adequately configured for a LIC mission of short duration, it does not possess the resiliency to conduct continuous operation in conflicts of higher intensity or in contingencies of extended duration. As a result, for the LIB to be context adaptable, it must be organized to operate across the spectrum of conflict. Adding more "trigger pullers" and another maneuver element significantly improves the context adaptability of the LIB.

Adding a fourth co. any does not come without costs. Another company will require the addition of some combat service support assets to units within the LIB. Based on the current distribution concept, the support platoon will require an additional multipurpose wheeled vehicle (HMMWV) and 3/4 ton trailer and two personnel in the ammunition section. The support platoon will also require an additional HMMWV and 3/4 ton trailer in the transportation section for use by the fourth rifle company ( the current TO&E allocates one HMMWV and trailer per

company). The medical platoon will require the addition of four combat medics. The battalion signal platoon will need an additional soldier on both the wire team and the maintenance team. Finally, the S1 and S4 sections will each require one additional soldier in order to provide administrative and logistics support for another rifle company. To summarize, in addition to the 130 personnel of the fourth rifle company, a total of 10 additional soldiers and 2 HMMWVs with trailers will be required to support them. This will require one and a half additional C-141 sorties to transport them.

The impact of this increase is minimal. Adding a fourth rifle company and additional support personnel to each battalion will mean ar increase of 1260 personnel, raising the total strength of the division to 12038. There will also be an increase of 18 vehicles. Because the original design guidance dictated an austere support structure for the LID, support for anything but operations of short duration must be provided by echelons above the division (EAD). The current CSS structure reflects this concept. Consequently, the increase in personnel and equipment places no additional strain on the division's support structure if EAD provide the bulk of the LID's logistical and personnel service support in sustained operations.

The major impact of the increase will be in sortic requirements. Up to 18 additional sorties will be needed to transport the division depending on loading plans. This will bring the total sorties required for the division to 534. This represents an insignificant price to pay when compared with the benefits derived from the additional company. This also represents a much smaller figure than one that would result from the addition of armor, antitank, and transportation assets. If the 500 sortic requirement is driving the force design train, adding a fourth company may be the only effective and acceptable alternative method available to thicken the LIB.

## VI. CONCLUSIONS

Infantry fight by battalions. Battalions must not be too weak. The strength of the infantry rests on the strength of the battalion. There must be sufficient men in the battalion to provide the sentries, double at night, to provide the patrols, and to ensure that the battalion as a whole does not get tired out by having too great a proportion of its men, for too many nights, doing too much patrol work. . . The tendency to add new weapons to the battalion, to build up big efficient support and headquarters companies must be watched, lest it infringe too much on the backbone of the battalion, the rifle company, for whose assistance they really only exist. . . It is the tired out depleted rifle companies that spell the tired battalion.

General Sir Richard N. Gale, "Infantry in Modern Battle," 1955 Commander, Northern Army Group, and British Army of the Rhine

Because of the increasingly complex demands of future conflict, the light infantry battalion must be structured to conduct operations in a variety of environments. However, as one author concluded, "the light force missions are so varied that it is impossible to have one standing organization that does it all." Consequently, while the light battalion's organization may not be perfect for any one situation or scenario, it should be the optimized to meet conflicting demands across the conflict spectrum. The addition of a fourth rifle company to the light infantry battalions represents an alternative that enhances this requirement for context adaptability.

Using historical examples from Vietnam, the Falklands, as well as the current USMC infantry battalion, it has been shown that the square battalion is better organized to achieve economy of force and unity of effort while it also improves the flexibility, and resiliency of the battalion. Additionally, another rifle company will standardize the light infantry battalion with its mechanized counterpart providing a measure of continuity in organization and tactical doctrine.

With the reduction of tensions between East and West, losses in overseas basing, reduced budgets, and inadequate strategic lift, the Army will be strained to retain a force structure that favors heavy forces. The Army of the future will have to contain forces that can be tailored and deployed rapidly. This precludes the luxury of context specific units. The LID organized with battalions of four companies, provides a force that can operate in a rapidly changing environment.

## **ENDNOTES**

- 1. Keith A. Dunn and William O. Staudenmaier, <u>Strategic Implications of the Continental Debate</u> (Washington, D.C.: Praeger, 1984), p. 93.
- 2. Glenn M. Harned, "The Principles of Tactical Organization and their Impact on Force Design in the U.S. Army" (Monograph, School of Advanced Military Studies, U.S. Army Command and General Staff College, Fort Leavenworth, Kansas, 2 December 1985), p. 1.
- 3. Michael J. Mazarr, "The Light-Heavy Debate Rears Its Head Again," <a href="https://doi.org/10.1001/j.med-forces-journal-international">https://doi.org/10.1001/j.med-forces-journal-international</a> (October, 1989), 99-104.
- 4. Lieutenant Colonel Robert B. Killebrew, "NATO, Deterrence, and Light Division," Military Review, LXV (May, 1985), 4.
- 5. Ibid., 4.
- 6. There is considerable confusion within the Army concerning the meaning of the term "light infantry." Many mistakenly believe that it is merely infantry that is not motorized or mechanized. Many also confuse light infantry with the infantry divisions that made up the bulk of Army forces in World War Two. These units are what has normally been referred to as "line infantry" or "infantry of the line." There are several good sources that point out that light infantry is distinquished as much by its style of fighting as it is by its lack of heavy equipment and firepower. These include Steven L. Canby, "Light Infantry in Perspective," Infantry, LXXIV, 4 (July-August, 1984), 28-31, Lieutenant Colonel John A. English, "Thinking About Light Infantry," Infantry, LXXIV, 6 (November-December), 19-25, David Gates, "Western Light Forces and Defence Planning 1. Some Parallels from the Past," Center Piece 8, (Aberdeen, Scotland: Center for Defence Studies, Autumn, 1985), Major Louis D. Huddleston, "Light Infantry Division: Azimuth Check," Military Review, LXV, 9 (September, 1985), pp. 14-21, Major Scott R. McMichael, Research Survey Number 6: A Historical Perspective on Light Infantry, (Fort Leavenworth, Kansas: U.S. Army Command and General Staff College, Combat Studies Institute, 1987), pp. xi-xiii and 234-235, and "Proverbs of Light Infantry," Military Review, LXV, 9 (September, 1985), pp. 22-28, Colonel Huba Wass de Czege, "Three Kinds of Infantry," Infantry, LXXV, 4 (July-August, 1985), 11-13.
- Three Kinds of Infantry, "Infantry, LXXV, 4 (July-August, 1985), 11-13.

  7. There are a number of authors that argue the merits of the Army's new light divisions. They include J. Holmes Armstead, "Too Light to Fight? The U.S. Army's Light Infantry Division's Exchange Firepower for Speed and Mobility, "International Combat Arms (November, 1988), 18-20, Robert J. Berens, "Still the Decisive Edge-'Rifles, Guts, and Staying Power,'" Army, XXXV, 11 (November, 1987), 22-29, Edwin W. Besch, "Are Our Light Divisions Too Light?" Army, XXXV, 2 (February, 1985), 42-49, William B. Caldwell, IV, "Not Light Enough to Get There, Not Heavy to Win: The Case of US Light Infantry," Monograph, School of Advanced Military Studies, U.S. Army Command and General Staff College, 4 December 1987, Major General Sam Damon and Brigadier General Ben Krisler, "Army Of Excellence?' A time to Take Stock," Armed Forces Journal International (May, 1985), 86-94, General William E. DePuy, "The Light Infantry: An Indespensible Element of a Balanced Forced," Army, XXXV, 6 (June, 1995), 26-43, Lieutenant Colonel David Eschel, Israeli Defense Forces, Retired, "The U.S. Army Light Infantry Division: Right or Wrong, National Defense, LXXI, 248 (May/June, 1987), 50-63, David Gates, Western Light Forces and Defence Planning, 3, The Light Forces, Center Piece 10 (Aberdeen, Scotland: Center for Defence Studies, Autumn, 1986), David C. Isby, "The U.S. Army's New Light Infantry Divisions," Jane's Military Review, 1986 (New York: Jane's, 1986), Michael J. Mazarr, "The Light-Heavy Debate Rears Its Head Again," Armed Foeces Journal Infantry Divisions: Are They Fit to Fight?" Armed Forces Journal Infantry Divisions: Are They Fit to Fight?" Armed Forces Journal Infantry Divisions: Are They Fit to Fight?" Armed Forces Journal Infantry Divisions: Are They Fit to Fight?" Armed Forces Journal Infantry Divisions: Are They Fit to Fight?" Armed Forces Journal International (October, 1989), pp. 99-104, David Segal, "Army Light Infantry Divisions: Are They Fit to Fight?"

- 8. Major General Wayne Knudson, "Memorandum for Record, 25 and 26 July 1988," Combined Arms Combat Developments Activity, U.S. Army Command and General Staff College, Fort Leavenworth, Kansas, 8 August 1988, p. 1.
- 9. Major Harry A. Tomlin, "Organizational Design of the Light Forces: A Structure for All Seasons" (Monograph, School of Advanced Military Studies, U.S. Army Command and General Staff College, Fort Leavenworth, Kansas, 29 November 1988), p. 4.
- 10. Momorandum for the Chief of Staff, Subject: Troop Units Basis for 1943, 2 November 1942.
- 11.Analysis Branch, "A Perspective on the Light Division: The U.S. Army's Experience, 1942-1945" (unpublished monograph, U.S. Army Center of Military History, Washington, D.C., June, 1989), p. 63.
- 12. Dr. Robert R. Palmer, <u>Reorganization of Ground Troops for Combat. Study No. 8</u> (Washington, D.C.: Historical Section, Army Ground Forces, 1946) p. 15.
- 13. "A Perspective on the Light Division," p. 64.
- 14. Ibid., p. 36.
- 15. In addition to the sources already cited, a summary of the Army's experience with the light division in World War II can be found in the following sources: Kent Roberts Greenfield, Robert R. Palmer, and Bell I. Wiley, The Organization of Army Ground Combat Troops, Vol I of The Army Ground Forces, Sub-series II of U.S. Army in World War II (Washington, D.C.: U.S. Government Printing Office, 1947), pp. 342-349, and Captain Jonathan M. House, "Designing the Light Division, "Military Review, LXIV, 5 (May, 1984), pp. 39-47.
- 16. Major Edward E.E. Thurman, "The Light Infantry Division: An Operational Force," Monograph, School of Advanced Military Studies (Fort Leavenworth, Kansas: U.S. Army Command and General Staff College, 3 June 1985), pp. 16-18, Dr. Michael J. King, Rangers: Selected Combat Operations in World War II, Leavenworth Paper #11 (Fort Leavenworth, Kansas: Combat Studies Institute, June 1985), pp. 43-53
- 17. General John A. Wickham, taken from a letter written to the commanders of each light infantry division, Spring, 1985 included in Major Ben Harvey's, "Feedback from Visits and Conversations with United States Army Light Infantry Divisions" (Memorandum for the Commanding General, Fort Benning, Georgia, 15 October 1986), p. Al.
- 18. Michael J. Mazaar, "The Light-Heavy Debate Rears Its Head Again," <a href="https://dr. Armed Forces Journal International">Armed Forces Journal International</a> (October, 1989), 99.
- 19. General Edward C. Meyer, White Paper, 1980: A Framework for Molding the Army of the 1980's into a Disciplined, Well Trained Fighting Force (Washington, D.C.: Headquarters, Depeartment of the Army, 1980), p. 1.
- 20. John L. Romjue, A History of Army 86. the Development of the Light Division, the Corps, and Echelons Above the Corps, (Fort Monroe, Virginia: Headquarters, U.S. Army TRADUC, December, 1981), p. 25.
- 21. The Light-Heavy Debate, 99.
- 22. Interview with Michael J. Mazarr quoted in the forthcoming book, The Light Infantry Division and US Military Strategy (unpublished manuscript, Washington, D.C.: Center for Strategic and International Studies, 1989), p. 51.
- 23. Mazaar, p. 53.
- 24. Brigadier General John C. Bahnsen, Jr., "The Kaleidoscopic US Army," Armed Forces Journal International (November, 1985), 78, The Light-Heavy Debate, 102.

- 25.Captain Timothy B. Hassell, <u>Army of Excellence Final Report. Volume II: The Light Infantry Division</u> (Fort Leavenworth, Kansas: U.S. Army Combined Arms Combat Development Activity, 29 June 1984), p. 1.
- 26. '"Army of Excellence"', 87.
- 27. Hassle, pp. 1-3 and 1-4.
- 28. Hassle, p. 1-5.
- 29. Brigadier General John C. Bahnsen, Jr., Retired, "Mr. President, We Can't Go!" Armed Forces Journal International (October, 1987), 114.
- 30. General John A. Wickham, "White Paper, 1984: Light Infantry Divisions," p. 2, and letter to the light infantry division commanders, Spring, 1985 included in Major Ben Harvey, "Feedback from Visits and Conversations with United States Army Light Infantry Divisions" (Memorandum for the Commanding General, 15 October 1986), p. A1.
- 31. Gates, pp. 9-11.
- 32. Harvey, p. A1.
- 33. Major Bill Godwin, "Discepancy in Light Infantry Missions and CSA directives" in the <u>Infantry Conferance Booklet</u>, Fort Benning, Georgia, 1987.
- 34. Major Peter N. Kafkalas, "The Light Divisions and Low-Intensity Conflict: Are They Losing Sight of Each Other?" Military Review, LXVI (January, 1986), pp. 20-22.
- 35. William J. Olson, "The Light Force Initiative," Military Review, LXV, 6 (June, 1985), p. 4.
- 36. William J. Kaufman, <u>Planning Conventional Forces</u>, 1950-1980 (Washinton, D.C.: The Brookings Institution, 1982), pp. 22-23.
- 37. U.S. Army Combat Developments Command, Evaluation of ROAD Operational and Organizational Concepts (U), 2 Books, ^ Annexes (Fort Belvoir, Virgina, 30 September, 1965), guoted in U.S. Army Combat Developments Command, Evaluation of U.S. Army Combat Operations in Vietnam (U): Short Title (ARCOV) (Fort Belvoir, Virginia, October 1966), p. 2-I-2.
- 38. Olson, 6.
- 39. Combined Arms Combat Developments Activity, "Light Infantry Division White Paper" (Fort Leavenworth, Kansas: U.S. Army Command and General Staff College, 27 January 1989), p. 2.
- 40. CACDA, pp. 2-4.
- 41. CACDA, p. 2.
- 42. Lieutenant Colonel David Eshel, "The U.S. Army Light Division, Right or Wrong? National Defense, LXXI (May-June, 1987), p.58.
- 43. Major Peter N. Kafkalas, "The Light Divisions and Low-Intensity Conflict: Are They Losing Sight of Each Other?" Military Review, LXVI (January, 1986), pp. 20-22.
- 44. Major William B. Caldwell, "Not Light Enough to Get There, Not Heavy to Win: The Case of U.S. Light Divisions" (Monograph, School of Advanced Military Studies, U.S. Army Command and General Staff College, 4 December, 1987), pp. 28-33, Gates, pp. 3-8.
- 45. Harvey, p. 1.
- 46. Major Mitchell M. Zais, "LIC: Matching Missions and Forces, Military Review, LXVI, 8, (August, 1986), p. 99.

- 47. Lieutenant Colonel Joseph C. Windle, Memorandum, Subject: Low-intensity Conflict Doctrine, Light Infantry Task Force, U.S. Army Infantry School and Center, Fort Benning, Georgia, 4 November 1985, p. 5, cited in Zais, p. 79.
- 48. Letter to light infantry division commanders, Spring 1985, p. A-1.
- 49. For an explanation of how this conclusion was reached see Michael E. Haith, "The LID in LIC: An Unresolved Dilemma" (unpublished monograph, Fort Leavenworth, Kansas: U. S. Army Command and General Staff College, May 1989).
- 50. Lieutenant Colonel Peter A. Bond, "In Search of LIC," <u>Military Review</u>, LXVI, 8 (August, 1986), p. 84.
- 51. Zais, p. 98.
- 52. White Paper, pp. 1-2.
- 53. General Carl E, Vuno, "The United States is a Strategic Force," <u>Armed Forces Journal International</u> (February 1989), 61.
- 54. Olson, 15.
- 55. Mazaar, pp. 105-117, Olson, 7-12.
- 56. Russell F. Weigley, <u>History of the United States Army</u> (Bloomington, Indiana: Indiana University Press, 1984), pp. 565-566.
- 57. See note 7.
- 58. Colonel Huba Wass de Czege, "NATO Interim Report: Employment Concepts for Light Infantry in Europe," Memorandum for Major General Edwin H. Burba, Jr,.Commanding General, 7th Infantry Division (Light), Fort Ord, California, 26 August 1988, p. 4.
- 59. Wass de Czege, 4-10 and C-11.
- 60. Wass de Czega, pp. 4-11 and C-4 to C-17.
- 61. Wass de Czege, pp. 4-10 and C to C-17.
- 62. Wass de Czege, pp. C-3 to C-4.
- 63. Steven Zaloga, "Soviet Infantry: Lessons from the War in Afghanistan," <u>Armed Forces Journal International</u> (October, 1989), 25-28.
- 64. Wass de Czege, pp. 9 and C-1.
- 65. Wass de Czege, pp. 1-8.
- 66. Harned, p. iii.
- 67. Harned, p. 5.
- 68. Ideas in this paragraph have been taken from Major W.A. Godwin, "ID(L) Doctrine, Tactics, and Techniques," p. 2, and Lieutenant Colone! J.F. Holt, "light Infantry Command and Control," p. 1, in <u>Infantry Conference</u>; <u>Light Infantry in Low-Intensity Conflict</u> (Fort Benning, Georgia: U.S. Army Infantry School, April 1986), and Wass de Czege, p. C-12.
- 69. Harned, p. 28.
- 70. Edward N. Lutwak, "Final Report: Strategic Utility of U.S. Light Divisions, A Systematic Evaluation," Contract Number, DABT60-84-C-0099( Chevy Chase, Maryland, 19 February 1989), pp. 5-6.
- 71. Timothy T. Lupfer, The Dynamics of Doctrine: The Changes in German Tactical Doctrine During the First World War, Leavenworth Paper No. 4, Combat Studies Institute (Fort Leavenworth, Kansas: U.S. Army Command and

- General Staff College), 55-59.
- 72. Shelby L. Stanton, <u>Order of Battle: U.S. Army, World War II</u> (Novato, California: Presidio Press, 1984), p. 13, and <u>Vietnam Order of Battle</u> (Washington, D.C.: U.S. News Books, 1981), p. 52.
- 73. Harned, p. 28.
- 74. Harned, p. 28.
- 75. Godwin, p. 2.
- 76. Harvey, p. 12.
- 77. Harned, p. 29.
- 78. Vuono. 61.
- 79. For a fuller description of "pooling" consult the following source: Greenfield, et al, <u>The Organization of Ground Combat Troops</u>. For a discussion of the controversy surrounding the issue of augmenting the LID with corps level assets see Caldwell, pp. 13-17 and 20-21, and Mazaar, pp. 80-84.
- 80. Harvey, p. 2.
- 81. Harned, pp. 30,33.
- 82. Wickham, p. 2.
- 83. Wickham, p. 1.
- 84. Olson, 6.
- 85. U.S. Army Combat Developments Command, "Evaluation of U.S Army Operations in Vietnam (U) (Short Title: ARCOV), Vol 1, Basic Report (Headquarters, U.S. Army Vietnam, 25 April 1966), pp. P-1 to P-3.
- 86. ARCOV, Vol. 1, Basic Report, pp. II-4 to II-7.
- 87. Virgil Ney, <u>Evolution of the U.S. Army Infantry Battalion: 1939-1968</u>, CORG-M-343 ( Alexandria, Virginia: Combat Operations Research Group, Technical Operations, 1968), p. 36.
- 88. ARCOV, Vol. 1, Basic Report, p. II-35, Ewell and Hunt, pp. 18-23
- 89. ARCOV, Vol 1, Basic Report, p. II-34.
- 90. ARCOV, Vol. 1, Basic report, p. II-34.
- 91. General William C. Westmoreland, "Letter of Transmittal,"  $\underline{ARCOV}$ , Vol 1,  $\underline{Basic\ Report}$ , p. 2.
- 92. U.S. Army Combat Developments Command, <u>Evaluation of ROAD Operational and Organizational Concepts (U)</u>, 2 Books, 6 Annexes (Fort Belvior, Virginia, 30 September 1965), quoted in U.S. Army Combat Developments Command, <u>Evaluation of U.S. Army Combat Operations in Vietnam (U): Short Title (ARCOV)</u> (fort Belvoir, Virginia, October 1966), pp. 2-II-50 to 2-II-51.
- 93. Evaluation of ROAD, in Evaluation of ARCOV, p. 2-II-50.
- 94. Vietnam Order of Battle, p.52.
- 95. There are few balanced accounts of the Falklands War. The two refered to for this paper were Major General John Frost, 2 Para, Falklands: The Battalion at War (London: Buchan and Enright, 1983), and Max Hastings and Simon Jenkins, The Battle for the Falklands (New York: W.W. Norton, 1983).

- 96. Major J. F. Fitter et al., "The Falkland Islands," An unpublished Battlebook (Fort Leavenworth, Kansas: U.S. Army Command and General Staff College, undated), pp. 3-37 and 38.
- 97. Fitter et al., pp. 3-39 to 43, Frost, pp. 15, 45-46.
- 98. Frost, pp. 56-57.
- 99. Fitter, et al., pp. 3-60 to 3-76, Frost, pp. 59-95, Hastings and Jenkins, pp. 233-253.
- 100. "Force Structure Changes Approved," Marine Corps Gazette, LXXII, 7 (July 1988), 4.
- 101. Jeffery Record, "The Army's Clouded Future" The Washington Post, 15 November 1988, p. A21.
- 102. Peter F. Herrly, "Middleweight Forces and the Army's Deployability Dilemma," <u>Parameters</u>, XIX, 6 (September 1989), 49.
- 103. Robert R. Ropelewski, "Marines Sharpen Focus on Low-Intensity Conflicts," Armed Forces Journal International (August 1989), 54.
- 104. Allen R. Millet, <u>Semper Fidelis: The History of the United States</u> <u>Marine Corps</u> (New York: MacMillan, 1980), pp. 525-526.
- 105. FMF Organization and Composition Board Report, "The Division," Marine Corps Gazette, XLI, 4 (April 1957), 26-27.
- 106. "The Division," pp. 28-29.
- 107. "Evaluation of ARCOV," pp. 2-II-50.
- 108. "Timetable for Force Structure Changes," <u>Marine Corps Gazette</u>, LXXII, 8 (August 1988), 4.
- 109. Lieutenant Colonel D.R. Blankenship, USMC, "Marine Expeditionary Unit," <u>Amphibious Warfare Review</u> (Summer 1988), 28-32.
- 110. Quoted in Harned, p. 6.
- 111. CACDA, "White Paper," p. 5, Olson, 15.
- 112. Olson, p. 10
- 113. John L. Romjue, <u>Division 86: The Development of the Heavy Division</u>, <u>September 1978-October 1979</u>, Vol. 1 of <u>A History of Army 86</u> (Fort Monroe, Virginia: Historical office, U.S. Army Training and Doctrine Command, June 1982), p. 50.
- 114. FM 100-20, p. E-37
- 115. Romjue, p. 48.
- 116. Major Thomas M. McGinnis, "Continuoous Operations: The Time Dimension of Battle," SAMS Monograph (Fort Leavenworth, Kansas: U.S. Army Command and General Staff College, December 1987), p. 39.
- 117. Steven L. Canby, "Final Report: Classic Light Infantry and New Technology," (Arlington, Virginia: Defense Advanced Research Project Agency, Contract Number 903-81-C-0207, 1981), p. 70 note.
- 118. Headquarters, Department of the Army, <u>Light Infantry Battalion</u>, Field Manual 7-72 (Washington, D.C.: U.S. Government printing Office, 16 March 1987), pp. 1-5 to 1-16, Headquarters, 7th Infantry Division (Light), <u>7th Infantry Division (Light) Capabilities Book</u> (Fort Ord, California, 15 June 1987), pp. 2-1 to 2-4 and 3-1 to 3-6.
- 119. Tomlin, p. 25.

#### BIBLIOGRAPHY

## PRIMARY SOURCES

## OFFICIAL HISTORIES

- Ewell, Lieutenant General Julian J., and Major General Ira A. Hunt. Sharpening the Combat Edge: The Use of Analysys to Reinforce Military Judgment. A volumn in the series Vietnam Studies. Washington, D.C.: U.S. Government Printing office, 1974.
- Greenfield, Kent Robert, Robert R. Palmer and Bell I. Wiley. The Organization of American Ground Combat Troops. Vol. I of The Army Ground Forces, Sub-series II of United States Army in World War II, ed. Kent Roberts Greenfield. Washington, D.C.: U.S. Government Printing Office, 1947.

## **DOCUMENTS**

- Godwin, Major William A., III. "Discrepancy in Light Infantry Missions and CSA Directives." <u>Infantry Conferance Booklet</u>. Fort Benning, Georgia, 1987.
- Harvey, Marjor Ben, III. "Feedback from Visits to United States Army Light Infantry Divisions." Memorandum for the Commanding General, Fort Benning, Geogia from U.S. Army Training Board, Fort Eustis, Virginia, 15 October 1986.
- Hassell, Captain Timothy B. "Army of Excellence Final Report. Volume II: The Light Infantry Division." Fort Leavenworth, Kansas: Combined Arms Combat Development Activity, 29 June 1984.
- Montano, Lieutenant Colonel Jim. "Operational Employment of the Light Infantry Division." Memorandum for the Commanding General, 7th Infantry Division (Light) from the Asst Chief of Staff, G3, Fort Ord, California, 6 July 1987.
- U.S. Department of the Army. "Army of Excellence Final Report, Volume II: The Light Infantry Division." Fort Leavenworth, Kansas: Combined Arms Combat Development Activity, 29 June 1984.
- . "Light Infantry Division Field Certification Report." Two Vols. Fort Hood, Texas: Training and Doctrine Command Combined Arms Test Activity. January, 1987.
- . "Infantry Conferance Booklet: Light Infantry in Lowintensity Conflict." Fort Benning, Georgia: U.S. Army Infantry School, April, 1986.
- . "Light Infantry Division White Paper." Fort Leavenworth, Kansas: Combined Arms Combat Development Activity, January, 1989.

- \_\_\_\_\_\_. "Light Infantry Division Review." Fort Leavenworth, Kansas: Combined Arms Combat Development Activity, Undated.
- Division." Fort Leavenworth, Kansas: Combined Arms Combat Development Activity, 15 March 1984.
- Wass de Czega, Colonel Huba. "NATO Interim Report: Employment Concepts for Light Infantry in Europe." Memorandum for Major General Edwin H. Burba, Jr. Commanding General, 7th Infantry Division (Light), Fort Ord, California, 26 August 1988.
- Wichham, General John A. "Letter to Light Infantry Division Commanders from the CSA." Office of the Chief of Staff of the Army, Washington, D.C., Spring, 1985.
- . "White Paper 1984: Light Infantry Divisions." Office of the Chief of Staff of the Army, Washington, D.C., 16 April 1984.

## MANUALS, PAMPHLETS AND CIRCULARS

- U.S. Department of the Army. <u>Light Infantry Battalion</u>. Field Manual 7-72. Washington, D.C.: U.S. Government Printing Office, 16 March 1987.
- . "Military Operations: U.S. Army Operational Concept for Low Intensity Conflict." <u>TRADOC Pamphlet</u> 525-44. Fort Monroe, Virginia: U.S. Army Training and Doctrine Command, 10 February 1986.
- . Operations. Field Manual 100-5. Washington, D.C.: U.S. Government Printing Office, 5 May 1986.
- \_\_\_\_\_\_. "7th Infantry Division (Light) Capabilities Book." Fort Ord, California, 15 June 1987.
- . The Tank and Mechanized Infantry Task Force. Field Manual 71-2. Washington, D.C.: U.S. Printing Office, 27 September 1988.

## SECONDARY SOURCES

#### BOOKS

- English, John A. On Infantry. New York: Praeger, 1984.
- Gates, David. <u>Western Light Forces and Defense Planning: The US Light Divisions</u>. Aberdeen, Scotland: Center for Defence Studies, 1986.
- Griffith, Paddy. <u>Forward Into Battle: Fighting Tactics from Waterloo to Vietnam</u>. Sussex, England: Antony Bird Publications, 1985.
- Weigley, Russell F. <u>History of the United States Army</u>. Enlarged Edition. Bloomington, Indiana: Indiana University Press, 1984.

## PERIODICALS AND NEWSPAPERS

- Armstead, J. Holmes, Jr. "Too Light to Fight? The U.S. Army's Light Infantry Divisions Exchange Firepower for Speed and Mobility." <u>International Combat Arms</u>, (November 1988), 18 and 20.
- Berens, Robert J. "Still the Decisive Edge-'Rifles, Guts, and Staying Power.'" Army, 37 (November 1987), 22-29.
- Bond, Lieutenant Colonel Peter A. "In Search of LIC." Military Review, 66 (August 1986), 79-88.
- Depuy, General (Retired) William E. "The Light Infantry: Indispensible Element of a Balanced Force." Army, 35 (June 1985), 26-43.
- Eschel, Lieutenent Colonel David, IDF. "The U.S. Army Light Division: Right or Wrong?" National Defense (May-June 1987), 50-63.
- "Force Structure Changes Approved." Marine Corps Gazette, 72 (July 1988). 4.
- Granger, Clinton E., Jr. "Infantry Emphasis-Where?" <u>Military Review</u>, 36 (April 1956), 60-64.
- Gale, General Sir Richard N. "Infantry in Modern Battle: Its Organization and Training." <u>Canadian Army Journal</u>, 9 (January 1955), 52-62.
- Herrly, Lieutenant Colonel Peter F. "Middleweight Forces and the Army's Deployability Dilemma." <u>Military Review</u> (September 1989), 46-59.
- House, Captain Jonathan M. "Designing the Light Division." <u>Military</u> Review, 64 (May 1984), 39-47.
- Kafkalas, Major Peter N. "The Light Divisions and Low Intensity Conflict: Are They Losing Sight of Each Other?" <u>Military Review</u>, 66 (January 1986), 18-27.
- Pugh, Lieutenant Colonel Paul F., USMC, and Major Thomas C. Linn, USMC. Rediscovering the Force in Readiness." <u>Armed Forces Journal International</u> (August 1989), 62-65.
- Record, Jeffery. "The Army's Clouded Future." The Washington Post, 15 November 1988, A21.
- Ropelewski, Robert R. "Marines Sharpen Focus on Low-Intensity Conflict." Armed Forces Journal International (August 1989), 54-56.
- Segal, David. "Army Light Divisions: Are They Fit to Fight?" <u>Armed Forces Journal International</u> (October 19880), 82-88.

- Zais, Major Mitchell M. "LIC: Matching Missions and Forces." <u>Military</u> Review, 66 (August 1986), 89-99.
- MONOGRAPHS, REPORTS, AND UNPUBLISHED PAPERS
- Bigelow, Michael E. "Major General Fox Conner and the Development of the American Infantry Division." Unpublished Monograph. Philadelphia: Temple University, June 1983.
- Caldwell, Major William B. "Not Light Enough to Get There, Not Heavy to Win: The Case of US Light Infantry." School of Advanced Military Studies, 4 December 1987.
- Drummond, Major Raymond R. "Light Infantry: A Tactical Deep Battle Asset for Central Europe." School of Advanced Military Studies, 2 December 1985.
- Fitter, Major J.P. et al. "The Falkland Islands." An Unpublished Battlebook. U.S. Army Command and General Staff College, Undated.
- McGinnis, Major Thomas M. "Continuous Operations: The Time Dimension of Battle." School of Advanced Military Studies, December 1987.
- McMichael, Major Scott R. "A Historical Perspective on Light Infantry." Research Survey No. 6. Fort Leavenworth, Kansas: Combat Studies Institute, 1987.
- \_\_\_\_\_\_. "Light Infantry Forces." Historical Bibliography No.2. Fort Leavenworth, Kansas: Combat Studies Institute, January 1984.
- Reese, Major Robert J. "Operational Considerations for the Employment of a Light Infantry Divisiopn in Contingency Scenario." School Of Advanced Military Studies, 1987.
- Richmond, Major Melvin E. "Corps Stay Behind Force: A Role for the Light Infantry Division on the Central European Battlefield." School Of Advanced Military Studies, 5 December 1987.
- Thurman, Major Edward E.E. "The Light Infantry Division: An Operational Force." School Of Advanced Military Studies, 3 June 1985.
- Tomlin, Major Harry A. "Organizational Design of Light Forces: A Structure for All Seasons." School of Advanced Military Studies, 29 November 1988.